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THE NATION'S SCHOOLS



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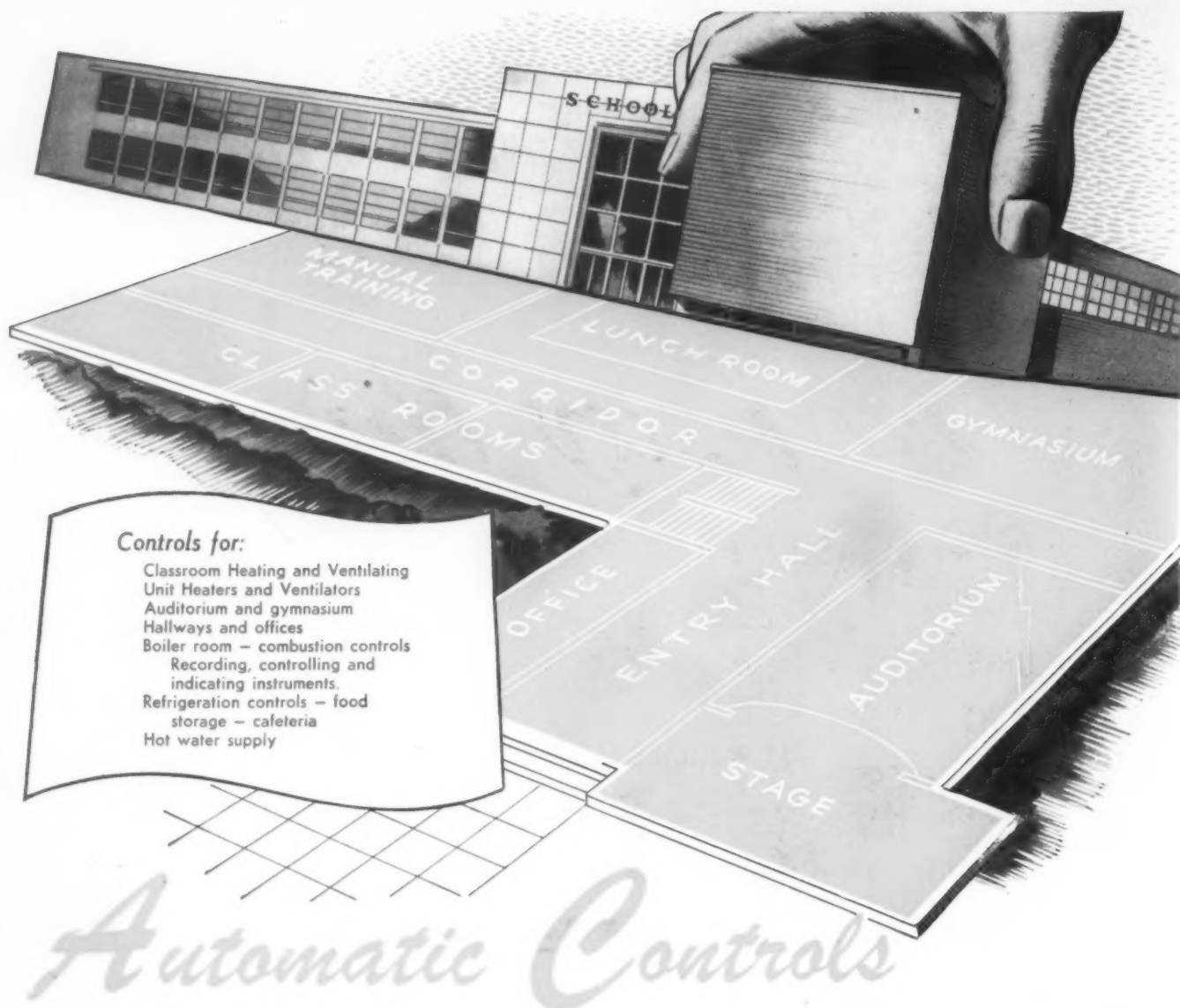
On Guard Against Bias in Textbooks
. *J. B. Edmondson*

Key to the German Question
. *Emil Ludwig*

Designing the School Bus Garage
. *Theron L. McCuen*

21 Original Articles, 12 Regular Features

SEPTEMBER 1947



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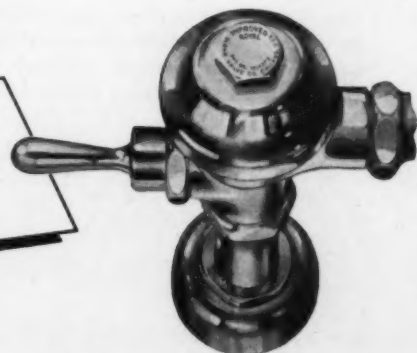
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THE NATION'S SCHOOLS



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MANAGING EDITOR: Raymond P. Sloan

ASSISTANT EDITORS:

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Kathryn E. Ritchie

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Published monthly by The Nation's Schools Publishing Co., Inc., 919 North Michigan, Chicago 11, Ill., U. S. A. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$3; foreign, \$4. Current copies, 35c each. Member, Audit Bureau of Circulations. Copyright, 1947, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Published on the 15th of the month preceding the date of issue. Change of address should be sent thirty days in advance of publication date.

AMONG THE AUTHORS



B. G. SCHMIDT

BERNARDINE G. SCHMIDT, acting director of special education clinics at Indiana State Teachers College, Terre Haute, Ind., obtained her education in Chicago, receiving her B.S. and M.A. degrees from De Paul University and her Ph.D. from Northwestern. She taught in the People's School in Chicago for four years and in the Chicago public schools for nine, going to the Indiana State Teachers College in 1944. Besides being a "fiddle player," Miss Schmidt is interested in photography, cooking, sewing, reading and writing. She organized the first alumni association for feeble-minded children who had been graduated out of that classification. An article about Miss Schmidt appears in the September issue of *Woman's Home Companion*.

F. ELENA DEVANEY is principal of South Elementary School and of Caryer Colored School at Carlsbad, N. M. Her early education and part of her teacher training were obtained in Nebraska, the latter at Nebraska State Teachers College. Her bachelor of science degree is from Central State Teachers College, Mt. Pleasant, Mich., and her M.A. from Colorado State College. Before becoming a principal, she taught for seven years in elementary schools and was for one year a welfare leader at Carlsbad, N. M. Reading, ranch life and travel, she says, are her special interests.

G. E. BROWN is guidance director and curriculum coordinator in the secondary schools of Carlsbad, N. M. Burlington, Kan., was the scene of his early education after which he obtained his A.B. from Colorado State Teachers College, his A.M. from Denver University and also from Columbia University. For two years he was a teacher in rural schools in Kansas and after that a high school principal in the same state for six years. He then became superintendent and served at Greeley, Colo., for thirteen years; at Bisbee, Ariz., for two, and at Ocean City, N. J., for fourteen.

WILLARD B. SPALDING ON June 1 became dean of the college of education of the University of Illinois going to that position from the superintendency of schools at Portland, Ore. Dr. Spalding attended Wesleyan and Boston universities in Massachusetts receiving his B.A. degree from the latter in 1923. He obtained his Ed.M. at the University of New Hampshire in 1928 and his Ed.D. at Harvard in 1939. He has held high school principalships successively at Princeton, Charleston and Hamilton, all in Massachusetts, and the superintendency at Belmont, Mass.; Passaic, N. J., and Portland, Ore.



W. B. SPALDING

IVAH GREEN, supervisor of rural education with the Iowa Department of Public Instruction at Des Moines, is one who likes to make scrapbooks and "writes for fun." She also enjoys poetry and music and is a frequent speaker at organization meetings. She is a graduate of George Peabody College for Teachers, having obtained her M.A. from that institution in 1939. She then became associated with the State Teachers College at St. Cloud, Minn., and in 1945 obtained her present position. She contributes frequently to her professional journals.



M. P. HORWOOD

MURRAY P. HORWOOD, professor of sanitary science at Massachusetts Institute of Technology, has specialized in bacteriology, sanitation and public health matters since 1913. For the last thirty years he has been actively engaged in making public health surveys for cities over the entire United States, in addition to his teaching responsibilities at M.I.T. He is the author of three books on public health and sanitary science and has published more than 50 papers and reports on sanitation and public health. Dr. Horwood was a member of President Hoover's conference on housing and home ownership.

CHARLES WESLEY BURSCH is chief of the division of schoolhouse planning of the California Department of Education at Sacramento. He received his B.S. degree from Kansas State Teachers College at Emporia in 1919, his M.A. and Ed.D. degrees from Stanford University in 1926 and 1930, respectively. He has had ten years' experience in teaching and school administration in Kansas and California and was assistant chief of the division of schoolhouse planning in the California Department of Education for four years before becoming its chief. Beyond his line of regular duty, Mr. Bursch was a consultant for statewide school plant conferences in Oregon and Montana in 1946, served on the Idaho Educational Survey in the same year, is a member of the 1949 Yearbook Commission of the A.A.S.A. and a member of the central standards committee of the National Council on Schoolhouse Construction, where he is in charge of the revision of school building standards of the council.



CHAS. W. BURSCH

* * *

On page 4 of the July issue, it was stated that DR. LOY NORRIS, superintendent of the Kalamazoo public schools, "is now working toward his doctorate at the University of Chicago." This was sadly in error since Dr. Norris completed his doctorate in 1942.



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Roving Reporter

This Is the Life!

Think of it—\$20 a month for board and room! Where? In Laurinburg, N. C. That's what teachers pay in that community at the attractively furnished Faculty Club provided for them by the school board. Last year, when it was found that there was no place for out-of-town teachers to live, a building was purchased for \$35,000 for a teacherage or club. Repairs and furnishings required an additional \$5000. This capital outlay, while large, is felt by the board to be a justified expenditure.

The operating costs are not excessive. The salaries of a matron and other employes are paid by the board. The teachers estimate that the \$20 a month they pay for board and room boosts their income by from \$40 to \$50 a month. They have private or semi-private rooms and the benefit of large reception rooms, an upstairs living room and home-cooked meals. Moreover, their lives are not hampered by dormitory restrictions. It sounds wonderful!

Pupils' Court Effective

You don't throw stones and break windows or push little girls down on the playground at Seifert School in Milwaukee without knowing that you will be haled before the student government court of the school to account

for your actions and take your punishment.

The court and its procedure are patterned after the city's municipal court, with its 10 jurors, district attorney, bailiff, chief of cadets (police), clerk and judge. Officers are elected by the pupils.

The court convenes once a week and considers only cases which arise outside the classroom in the school neighborhood. Charges are preferred by a school cadet for such misdemeanors as throwing snowballs, fighting, jaywalking, trespassing and stealing.

Each offender is allowed to tell his own story and may call witnesses to help him out. He may be questioned by a juror or court official. If the pupil is found guilty, the jury suggests a sentence, although the judge makes the final decision as to the punishment.

In a typical case, a boy caught jaywalking was sentenced to learn nine safety rules and to appear in court to recite them. Because he was not able to remember all the rules he was required to report to the judge the next morning to recite them. In other cases, playground privileges are taken away, restitution must be made when stealing is involved, apologies must be offered and help must be given when the misdemeanor is one of trespassing. The aim is to impose remedial sentences rather than severe punishment.

According to Principal A. W. Peck, the boys and girls have developed such a respect for the court that they are not anxious to appear there. However, the whole atmosphere is one of understanding and the idea is stressed that all children make mistakes in conduct and that the court is a friendly agency for showing defendants how to recover lost ground and "move forward in good grace."

A Tip on Small School Guidance

"An important factor in guidance and counseling work," says Fred J. Greenough of Union High School at Carpinteria, Calif., "is the pupil-teacher relation developed through contact in the classroom.

"In a small high school, teachers are required to handle two or more activities because of limitations of the size of the staff. Some teachers are capable of handling three or more. This versatility is an important consideration in other ways than for the purposes of schedule making.

"A teacher is sometimes at a disadvantage because of the subject content of a particular course which does not afford her an opportunity to demonstrate all-round proficiency and bring out her personality effectively. The pupil may mistakenly associate a teacher's personality with a required course in which his interest is negative. An alternate or second activity which engages the interest of both pupil and teacher is an opportunity on which the alert teacher can capitalize and use to advantage in other situations calling for pupil cooperation and effort.

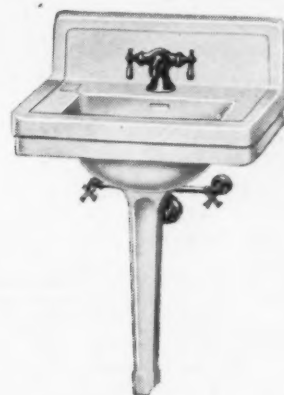
"The small school guidance program can and should be designed to take advantage of those natural interests of pupils and teachers so that pupil confidence will be voluntarily achieved instead of begged. The 'will to do' will be more easily achieved through mutual respect of teacher and pupil. The music teacher, coach, science teacher, commercial teacher, all have pupil followers and should be involved in any guidance program affecting the pupils whose special interests attract them to the personalities and interests of these particular instructors."



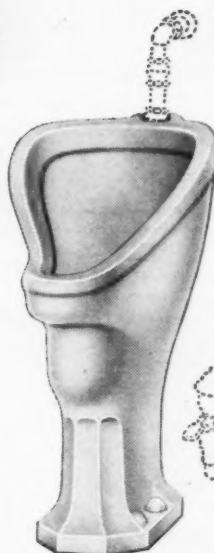
The Mississippi almost covered this elementary school near Quincy, Ill., when it went on a rampage. The Middle West wants no more floods.



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NO. 5 REDFLASH Boiler. Shipped in sections for easy assembling in either old or new buildings. Large firebox has abundant coal-carrying capacity, thus minimizing fueling attention. Long flue travel promotes operating efficiency. Front blow-off tapping, large flue doors, and wide ashpit doors afford easy maintenance. Available for coal, oil, or stoker firing.

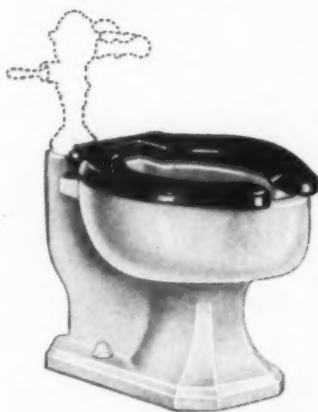


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MADSTONE Urinal. Can be installed with foot valve, as shown, or for manual or automatic operation. Functions like a water closet. Syphon jet action provides efficient, complete flushing. Genuine vitreous china construction assures you of a sturdy, easily cleaned fixture.



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QUESTIONS AND ANSWERS

Are Pupils Growing Flighty?

Question: It seems to me that pupils are growing indifferent toward their school work. Is this something that is peculiar to our school? What part does economic prosperity play in promoting this type of attitude? Has degree of intelligence anything to do with it? Are pupils in junior and senior high schools becoming flightier?—J.J.H., Iowa.

ANSWER: In Cleveland and its suburbs we do not note a growing indifference to school responsibilities. It is just the opposite with us because of the difficulty pupils have in getting into college or obtaining employment without satisfactory recommendations from high school. Whenever indifference exists, there is no scientific evidence that the I.Q. is the cause. "Flightiness," which you may observe in secondary school pupils, may be the result in part of the school's failure to provide proper outlets for pupils' interests and energies.—PAUL A. REHMUS.

Air Disinfection

Question: What information is available on controlled studies or germicidal lamps in the classroom? We have been using the lamps in kindergarten and in the first and second grade rooms. We believe they are doing a good job in controlling respiratory diseases but our system is not sufficiently large to run a controlled study. We have been comparing our primary with our intermediate grades, but there are too many uncontrolled features to make our work valid.—H.F.S., Neb.

ANSWER: Research on the effectiveness of germicidal lighting for the purpose of reducing the spread of air-borne infection is limited. Planned experiments have been undertaken at the Germantown Friends School in Philadelphia and in the public schools of Swarthmore, Pa.

Another study in the use of ultraviolet irradiation of air is now in progress at the Cato-Meridian Central School, Cayuga County, and the Port Byron Central School, both in New York State. Information concerning the New York experiments can probably be obtained by writing to the New York State Department of Health.

The studies at Germantown Friends School and Swarthmore have been reported in a series of articles by William Firth Wells and Mildred Weeks Wells: "Air Disinfection in Day Schools," *American Journal of Public Health* 33:

1-8 (December) 1943; "Sanitary Ventilation by Radiant Disinfection," *Scientific Monthly* 60: 325-34 (May) 1945; "The Environmental Control of Epidemic Contagion," *American Journal of Hygiene* 35: 97-121 (January) 1942, and "Measurement of Sanitary Ventilation," *American Journal of Public Health* 28: 343-50 (March) 1938.

The General Electric Company has also issued reports concerning the use of germicidal lighting. When writing to this company at Nela Park, Cleveland 12, Ohio, ask for its pamphlets entitled "The Lamp That Kills Germs" and "Germicidal Radiation."—LESLIE W. KINDRED.

How Many Secretaries?

Question: On what basis is secretarial assistance provided to school principals?—K.J.C., Ala.

ANSWER: One secretary is provided for every school in our system regardless of size. Schools in excess of 750 pupils have one additional secretary for every 750.—PAUL A. REHMUS.

May State Funds Be Used?

Question: In what states may state funds be used to support kindergartens? And in what states may state funds be legitimately spent for the support of junior colleges?—C.F.J., Conn.

ANSWER: The information in my possession is not completely up to date, but it indicates that state funds may be used to support kindergartens in at least a dozen states: California, Connecticut, Florida, Illinois, Indiana, Michigan, Missouri, New Jersey, New York, Ohio, Utah and Washington.

State funds are allocated to local public junior colleges in California and Texas and probably in one or two other states which I am unable to name on short notice. The foregoing applies to state-collected funds apportioned to local districts and is distinct from the different question of the power of local boards of education to levy local taxes for kindergarten or junior college purposes.

Locally supported kindergartens are permissible in nearly all states and locally supported public junior colleges are definitely authorized in at least 15 states, either by statute or by judicial decision. Thus, considerable progress

has been made toward the expansion of the concept of the common school to include the kindergarten and all grades up through the fourteenth.—M. M. CHAMBERS.

Guidance Library

Question: We are planning to develop a guidance library. Can you give us information as to where we can obtain materials? We hope eventually to install a full time guidance teacher with counselor service. Our testing program is shaping up fairly well but we have confined most of our efforts to the freshman class.—H.F.S., Neb.

ANSWER: An adequate guidance library should include material of two general types: (1) occupational information (occupational briefs, monographs, charts) for the pupils and (2) professional materials (books, pamphlets, directories, audio-visual aids, periodicals) for administrators, teachers and counselors.

The following references are cited as some examples of professional books which provide: (1) information and source materials on current practices and techniques and (2) sources of bibliographical material on the various phases of counseling and guidance, including occupational information.

1. *Occupations—The Vocational Guidance Magazine*, National Occupational Conference, 551 Fifth Avenue, New York.

2. Bingham, W. Van D.: *Aptitudes and Aptitude Testing*, New York, Harper and Brothers, 1937.

3. Bingham, W. Van D., and Moore, B. V.: *How to Interview*, 3d Ed., New York, Harper and Brothers, 1941.

4. Erickson, C. E., and Smith, G. E.: *Organization and Administration of Guidance Service*, New York, McGraw-Hill Co., 1947.

5. Forrester, G.: *Occupations, a Selected List of Pamphlets*, New York, The H. W. Wilson Co., 1946.

6. Greenleaf, W. J.: *Guide to Occupational Choice and Training*, Federal Security Agency, Office of Education, Washington, D. C., U. S. Government Printing Office, 1947.

7. Jones, A. J.: *Principles of Guidance*, 3d Ed., New York, McGraw-Hill Co., 1945.

8. Traxler, A. E.: *Techniques of* (Continued on Page 10.)



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V. T. THAYER.....Ethical Culture Schools
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CHARLES H. THOMPSON.....Howard University
EDMUND H. THORNE.....West Hartford Schools
VINAL H. TIBBETTS.....Am. Ed. Fellowship
C. C. TRILLINGHAM.....Los Angeles County Schools
JULIUS E. WARREN.....University City Public Schools
W. T. WHITE.....Dallas Public Schools

Guidance, New York, Harper and Brothers, 1945.

9. Shaffer, L. J.: *The Psychology of Adjustment*, New York, Houghton Mifflin Co., 1936.

10. Shartle, C. L.: *Occupational Information*, New York, Prentice-Hall, 1946.

11. Strang, R.: *Educational Guidance, Its Principles and Practice*, New York, The Macmillan Co., 1947.

12. Super, D. E.: *The Dynamics of Vocational Adjustment*, New York, Harper and Brothers, 1942.

13. Symonds, P. M.: *The Dynamics of Human Adjustment*, New York, D. Appleton-Century Co., 1946.

14. Williamson, E. G.: *How to Counsel Students*, New York, McGraw-Hill Co., 1939.—LESLIE W. KINDRED and ROY B. HACKMAN.

Compulsory Summer School?

Question: Should teachers be required to attend summer school every three to five years?—W.E.F., Wash.

ANSWER: No. When we are dealing with adults, compulsions seldom produce wholesome attitudes or obtain the results desired. It is, of course, of the greatest importance that every legitimate means be used to keep teachers alive and growing.

Attending summer school every few years may be just the thing for some teachers and not at all suitable for others. Those who should attend ought to be urged strongly to take full advantage of such opportunities. Some teachers ought to rest and pursue leisurely reading, part of which may well have a direct relationship to their professional duties. Others ought to continue the individual investigations and research studies in which they have become interested during their regular teaching.

Some ought to refine, ed't, improve and write up for publication the results of experiments with new technics which they have used successfully in their daily work. Still others ought to travel or attend professional meetings.

Each administrator ought to advise with his teachers concerning those phases of their education and experience which are in the greatest need of strengthening and should suggest some of the things teachers might and should do during the summer. Every school system ought to see to it that larger salaries and other tangible means of recognition are assured to superior, growing, happy teachers. But the laying down of specific requirements, such as attending summer school, smacks too much of practices and procedures used with children. When boards of education accord teachers the support and recognition they deserve, the need for "growth" requirements is greatly diminished.—GEORGE E. CARROTHERS.



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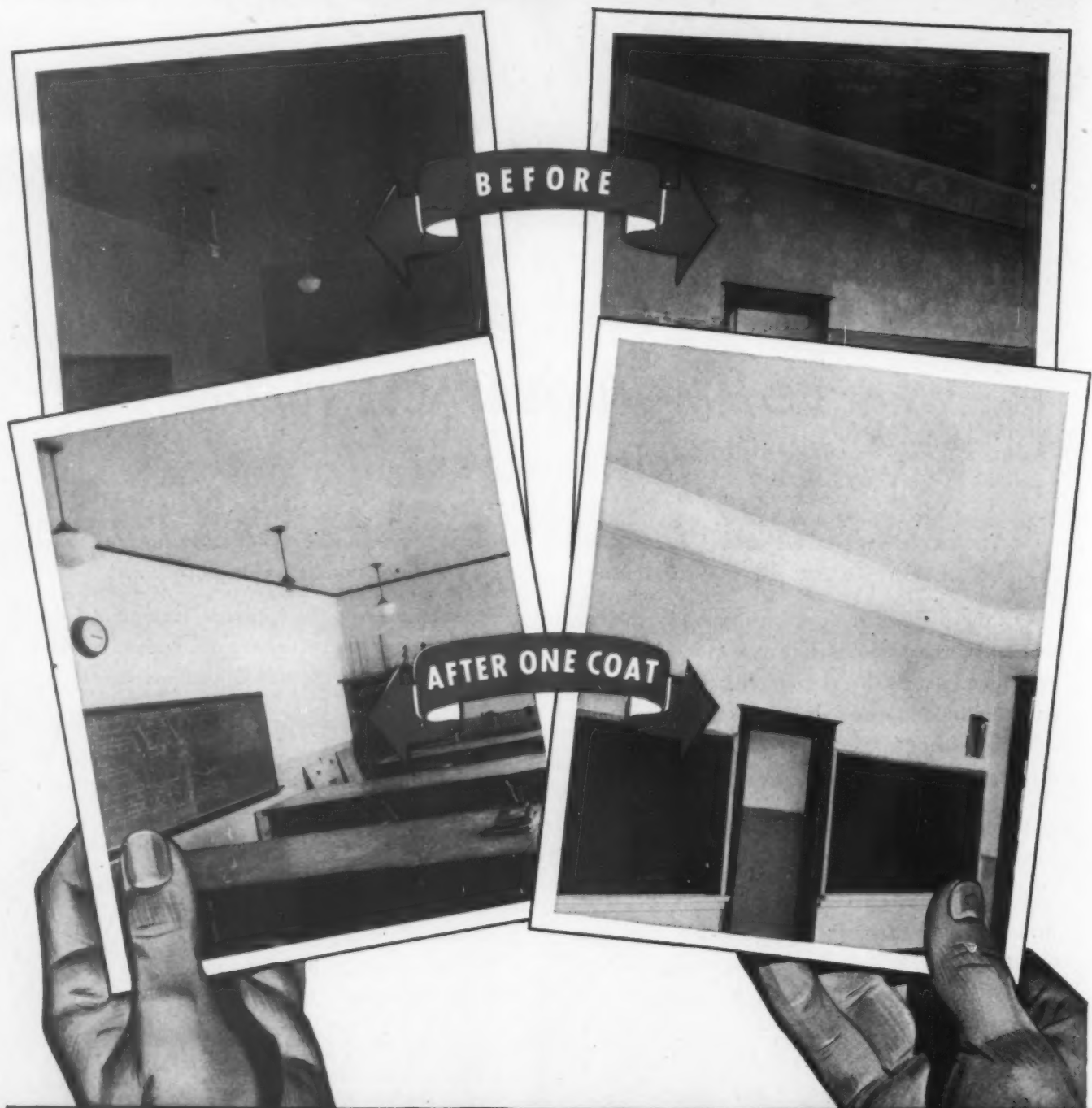
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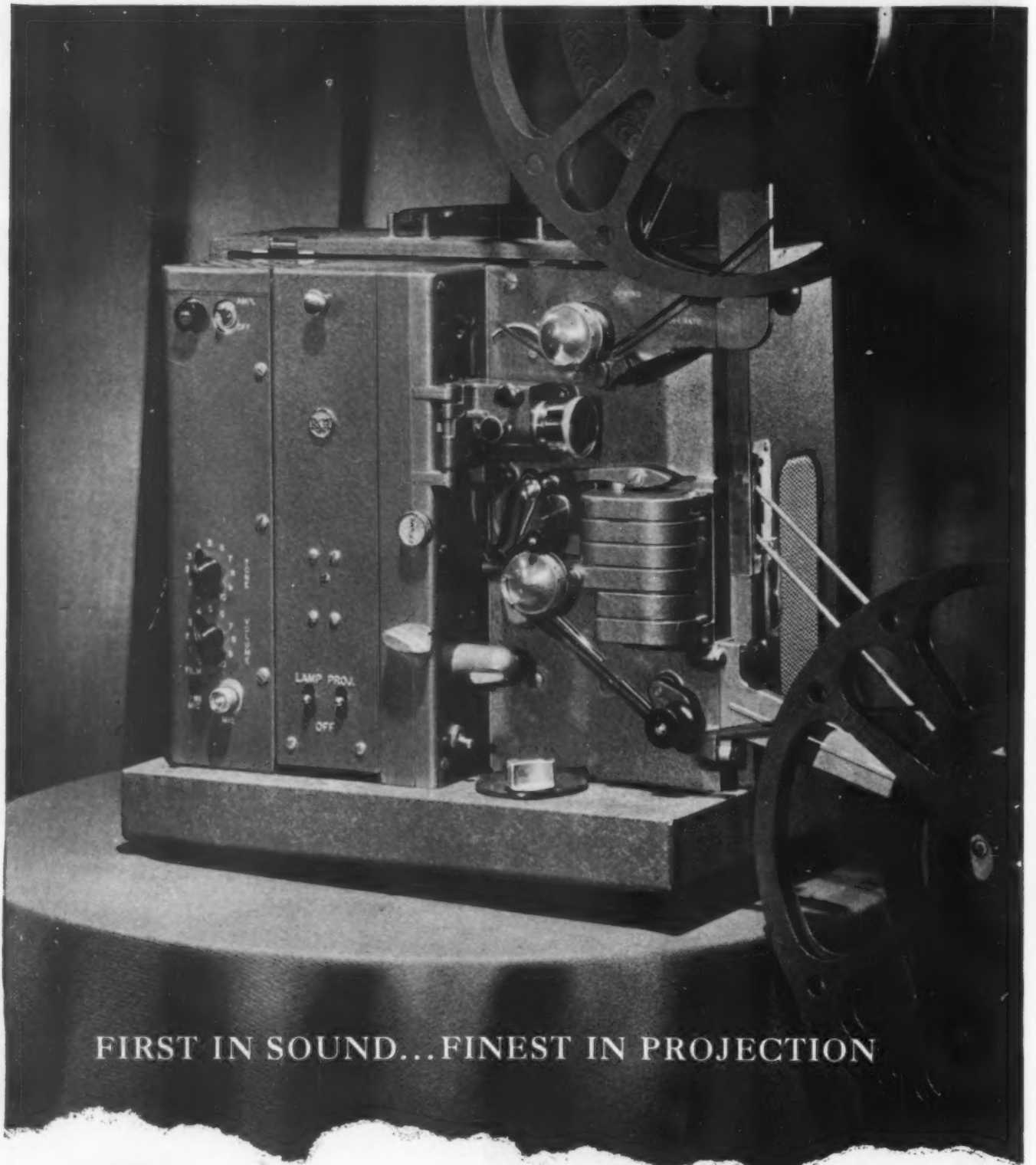
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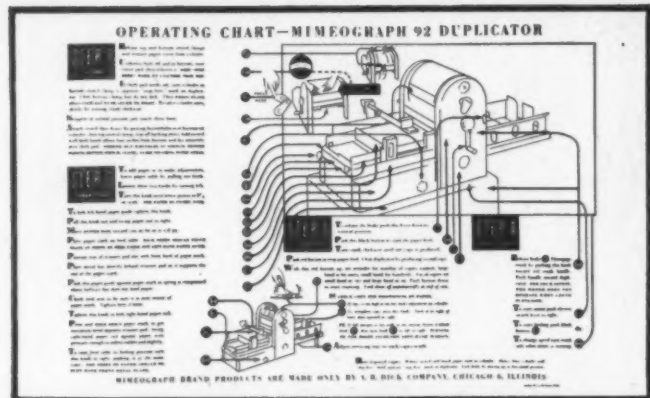
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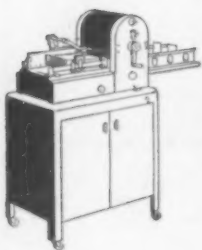


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The NATION'S SCHOOLS

Looking Forward

Schools Open Again

PUBLIC SCHOOLS OPEN AGAIN THIS MONTH THROUGHOUT the nation in relatively the best economic position since the 1920's. Not only have teachers' salaries been generally increased by an average of nearly \$500 but operating budgets in general have been added to substantially. The concept of a \$2400 minimum wage for teachers with a bachelor's degree has been widely accepted. Budgetary changes have been general throughout the country with the largest relative gains having been achieved in New England and the South. This increased finance was furnished by communities and states without apparent strain and without federal aid, despite the fact that a large segment of the organized teaching profession had maintained that increased support from local and state sources was impossible. Along with these actions is coming a new concept of the responsibility of the state for improved public education.

Despite increases from local and state sources amounting to an estimated three quarters of a billion dollars the public schools are still in a critical position. At least another half billion dollars is needed for the succeeding academic year (1948-49) for operating expenses and building funds for new construction and essential modernization of existing plants.

While the low point appears to have been reached in the drift of teachers into other professions, it will take at least four years and possibly longer before any enlarged number of new entrants is available for replacements and for improvements. Salary and tenure provisions in a number of states will probably result in extensive demand for in-service training for nondegree teachers, particularly in the South, for the next half dozen years.

The really significant factor in the entire situation has been the growth of a dynamic public opinion toward public education and an eagerness on the part of many interests to eliminate existing weaknesses. Press, radio, labor, business and commerce have cooperated unusually well to make the people conscious of the plight of their schools.

The present is no time for professional satisfaction with current progress in improved public school support. The newly awakened public opinion will not long be satisfied with merely receiving the same type of serv-

ice for heavily increased expenditures. The people will and should demand better schools and greater equality of individual opportunity. Fundamental reform demands improved structure of school districts sufficiently large to be capable of furnishing both elementary and extended secondary education for rural and suburban as well as urban children. The narrow academic school, pointed chiefly to serve the small minority preparing for the professions, must give away quickly to one founded on a broader social concept and organized to meet the needs of all children regardless of ultimate economic destination.

Unless the teaching profession and school administrators are willing to give stronger consideration to a safe and adequate physical environment for teaching, the nation may soon face a situation where present buildings are unable to provide for the children and where fire hazards may produce national disasters.

If the organized teaching profession does not furnish more dynamic and aggressive interest in reform and improvement, leadership in public education may quickly pass from the teaching profession to the aroused layman as in the past when public schools failed to respond to popular need.

Southern Development

IT HAS LONG BEEN KNOWN THAT THE 10 SOUTH CENTRAL states (Alabama, Arkansas, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee and Texas) are potentially the wealthiest region in the United States. Wartime changes in their economies have brought this fact even more significantly to the fore.

These states comprise 25.5 per cent of the total continental land area and contain 28,703,000 people (21.8 per cent of the total population). They have suffered a net loss of 2.6 per cent since 1940. Their total 1946 cash income from crops and livestock alone was \$5,769,000,000 in contrast with only \$2,000,000,000 in 1936.

The grand total income of these ten states was \$24,337,000,000 in 1945, a gain of 132 per cent over 1940. During the same period the total national income increased only 101 per cent. Many of these states which had the lowest annual per capita income have closed the wide gap between national and regional income so

that there is now only a \$300 differential between the national and south central regional average, \$850 contrasted with \$1150.

Similar improvements have taken place in the southeastern states. The share of the national income for Delaware, Florida, Georgia, Maryland, the Carolinas, the Virginias and the District of Columbia rose to \$17,132,000,000 in 1945, an increase of 119 per cent, or a per capita income of \$895.

Economists generally believe that these changes are significantly permanent and mark a new era in southern regional development. Many of these states are being rapidly industrialized and recent trends toward uniform freight rates will permit competition with the older industrial areas. Improved educational facilities plus certain psychological changes point toward a bright economic future for these 18 south central and southeastern states. At the current rate of development, the term "poor South" will have little meaning within a decade.

Chicago Public Schools

AN AROUSED OPINION AFTER THE NATIONAL EDUCATION Association investigation of public education in Chicago crystallized in the 1947 Illinois legislature on three proposed legal reforms for the Chicago public schools. These fundamental requirements to destroy the unholy alliance between the public schools and the Cook County democratic machine included: making the superintendent the responsible executive officer of the board of education; eliminating city hall control by substituting an elective for an appointive board, and providing fiscal independence from the mayor and common council.

All three reforms were absolutely essential to an improved system of public education. The multiple executive had simply made the mayor-appointed board president the actual coordinating executive as well as the political liaison agent. The need for an elective instead of an appointive board is too obvious to require elaboration. The power of a popularly elected school board to determine educational needs and then to spread its own taxes, with direct recourse to the people for unusual requests, is the third essential for educational freedom.

The legislature passed the first bill making the superintendent the chief executive officer of the board. The second and third reforms were unfortunately sabotaged by a combination of political forces in Chicago, certain pressure groups and the Chicago Principals' Club, many of whose members owed their positions to the discredited Johnson administration. Certain administrative personnel not only succeeded in having resolutions passed requesting that the dependent status quo be continued but worked actively to defeat these bills. Professional attitudes of this nature are difficult for the layman to understand and seriously reduce popular confidence in the integrity of the teaching profession. It is simply another illustration of what reactionary educational interests in many states are doing to prevent essential

reforms in structure, instruction, instructional organization, personnel and finance.

As a result, close relations of the public schools with the political machine and with certain organized interests will continue. Personnel will be harried by ward bosses; contractors and supply men will be asked to finance machine requirements; peculiar budgetary imbalance between instructional and noninstructional activities will continue; personnel selection may continue to be political and social rather than based on merit, and the welfare of the children and of the people will continue to be recessive.

There is one bright spot. For the first time the superintendent of schools will actually be the responsible executive officer of the board of education with all the other activities subordinated to instruction. Dr. Herold C. Hunt, formerly of Kansas City, Missouri, has been selected as superintendent. He has both the ability and the courage to insist upon essential reforms and to see that they are carried out. It's a tough job and one that may exact heavy physical penalties as it did in the case of previous strong superintendents, particularly the late Dr. William A. Bogan.

Dr. Hunt has behind him the support of powerful educational and lay organizations. He is in the strongest position in which any Chicago superintendent has ever stood to reform internal existing conditions and to divorce machine politics from education. Public school minded Americans will watch his career with great and continuing interest.

New Reports to Parents

INCREASED RESPONSIBILITY FOR INTERPRETING PUBLIC schools by community boards of education has been a significant feature of the last five years. The phase when many educationists and superintendents considered boards of education merely as blocks on the road to educational progress seems happily to have passed. School boards are currently emerging in their true democratic rôle as planning, appraising and interpreting agencies, taking again their proper leadership while delegating executive responsibilities to the superintendent.

Among the newer reports recently published are two comment-worthy interpretative monographs of the school committee of Winchester, Massachusetts, where Forbes H. Norris is superintendent. The first is a handbook for parents whose children are entering school for the first time and the second is a new type of annual report which answers questions that parents have raised during the year instead of merely presenting compiled statistical information. They were prepared jointly by the teachers and superintendent and published under the direct sponsorship of the school committee. Both of these publications merit wide reading.

The Editor

The NATION'S SCHOOLS



Introducing

ARTHUR HENRY RICE

Managing Editor

THE NATION'S SCHOOLS TAKES GREAT PLEASURE IN ANNOUNCING the appointment of Dr. Arthur Henry Rice as full time managing editor beginning September 1. Under this reorganization Raymond P. Sloan, as the publishing executive, will become Editorial Director and the present Editor will continue to write the editorials.

Dr. Rice brings to his new work twenty-seven years of rich editorial, teaching and interpretative experience, first, as a newspaper reporter in Saginaw, Michigan, then three years as teacher and director of publications at Central Michigan College of Education, eighteen years as editor and director of publications for the Michigan Education Association and most recently as visiting member of the University of Michigan faculty in education. He is editor of the School Public Relations Association and is currently president of the Educational Press Association.

Dr. Rice is a native of Saginaw, where he was born in 1900. From the time his parents allowed him to make up his own mind, he was certain that journalism and printing were to be his life passions. While attending Arthur Hill High School he set up a job work print shop which he operated commercially during and after high school years. He joined the news staff of the *Saginaw Daily News* in 1919, working on general assignments for five years.

During 1923 he decided that there might be something in college education which should at least be given a fair chance. He spent the next few years at Alma College and Central Michigan College of Education from which he was graduated as a bachelor of arts and teacher in 1926. While a senior at Mt. Pleasant, Pres. E. C. Warriner decided that this reportorially minded student could also contribute to institutional welfare so he made him director of publications and teacher of

journalism. Whether Dr. Rice received his first degree for his teaching or his course work will never be known.

Just before the big depression in 1929, he accepted Secretary Ernest Cameron's offer to become editor of the *Michigan Education Journal* and later assumed charge of all professional publications and informational service. During his eighteen years with the Michigan Education Association, he sampled the educational offerings of the University of Southern California and then spent three more summers at the University of Michigan to complete his master's degree in 1934.

By that time, someone, probably his wife, persuaded Editor Rice that he might as well go along and get the scholar's hard-to-get blue card, the doctor of philosophy degree. For the next thirteen years, during evenings, Saturdays, Sundays and vacations, while Mrs. Rice kept the three children quiet, he worked with his courses, instructors and research in and out of season. The university conferred the doctorate on him in 1947 for a brilliant dissertation entitled "Some Desirable Policies for the Official Publication of a Voluntary Membership Organization." Like most academic productions, its title was sufficiently long to tell the story of his professional as well as academic life.

His main thesis and motivating ideal is that professional publications must lead the way in the development of a social and professional conscience and toward the acceptance of responsibility far beyond the mere mechanics of editing, maintaining jobs for the secretariat and keeping teacher members well under the cautious organizational thumb.

After being duly anointed to the doctorate, Arthur Henry Rice decided that he was ready for the fourth phase of his professional career. Confronted by several choices, he wisely decided that by becoming managing editor of *THE NATION'S SCHOOLS* he would have the best professional opportunity to carry out his ideas for improving educational journalism.

In this task we wish him great success and bespeak the continued cooperation of our great body of friends whose enthusiastic support and helpful contributions have brought *THE NATION'S SCHOOLS* to its high professional standing as the magazine of better school administration.—ARTHUR B. MOEHLMAN.



Fifth grade pupils at Williamston, S. C., study soil conservation. T. R. Little of the Soil Conservation Service points out how sand piled many feet deep here was washed from the nearby fields.

IN THIS TIME OF WORLDWIDE confusion and moral uncertainty, the South is one of the few bright spots on my map. Recovering from the paralysis of eighty years, it is gathering strength and moving. There is plenty of motion elsewhere but one often cannot chart its direction. In the South the direction is clearly toward a sound economy, better educational opportunity for all and eventual justice in human relations.

This at length is Reconstruction, worked out from within, rather than imposed. Leadership is indigenous, as it must be where the form of society is cast in a firm mold. It may be that external critics have helped, as a gadfly might help. But, like gadflies, they can neither hold the reins nor pull the load. Quieter and more sympathetic forces from without have also played their part in proportion as they have enlisted authentic southern leadership.

The point, I believe, is that the South is the first sizable region in the United States to sense so clearly and explicitly its dependence upon its world of physical resources as to build that fact squarely into its program of education.

In the words of one southern educator, William McGlothlin: "We have to teach not only the three R's but a fourth—Resources." From Virginia to Florida, west to Texas

Resource Education

THE FOURTH "R" in the SOUTH

**By teaching the proper use of its resources
the South is unlocking the door to its economy**

PAUL B. SEARS

Professor of Botany, Oberlin College

and north through Kentucky the phrase "resource-use education" is becoming familiar to administrators, teachers and the public.

Conferences and workshops are dealing with the problem. Several of these have been regionwide, attended by leaders from as many as 12 or 14 states. Notable among these have been the conferences held at Gatlinburg, Tenn., in 1943 and 1944 and the conference at Chapel Hill, N. C., in 1946. At the latter meeting white and colored delegates gathered for discussion in an atmosphere of mutual respect and free expression.

The several states have also spon-

sored conferences and workshops for both administrators and teachers. Departments of education have appointed state directors of conservation or resource education. Teacher training institutions have developed courses, in many instances for the regular academic year, in other cases courses for the summer season only.

Under the chairmanship of Dr. Roscoe Martin of Alabama Polytechnic Institute, a group of political and social scientists representing several southern states has been carrying on a study of resource administration. In the South, as elsewhere, the state agencies which deal with the various natural resources—

Pupils with their teacher at Williamston, S. C., observe how the growing of the kudzu vine has healed severely eroded land.



soil, water, timber, minerals, fish, wildlife and recreation—have in the past worked in haphazard fashion with overlapping functions and no clear coordination. Practical experience has shown that none of these resources can be dealt with in isolation from the others and the study of the group has been directed toward this aspect of the problem, as well as toward obtaining greater efficiency and better personnel in administration.

The South is the traditional defender of local rights. Nowhere else will one find greater emphasis on the community and its rights than in the South. Resource education gets at the thing which is fundamental to local rights, that is, local responsibility. Schools are being expanded into centers from which improved living radiates. Beginning in many instances with the handling, storage and preparation of food in community centers, the effect expands into gardens, dairies, poultry

yards and kitchens and elsewhere.

The movement is rooted in the hard ground of adversity. 4-H clubs, agricultural demonstration and extension began to be really effective first in the South, under the leadership of Seaman Knapp. Demonstration, or example, if you prefer, is still the keynote. The T.V.A., affecting as it does directly some seven states, is a vivid demonstration throughout of the value of conserving soil, forests and water. It

also sets an example in the technic of working through local agencies and of encouraging self sufficiency in farming operations.

The Plant-to-Prosper campaign, sustained through the years by a Memphis newspaper, the *Commercial Appeal*, has been a magnificent example of demonstration sponsored by private enterprise. It has been directed toward encouraging diversification and self sufficiency and has resulted in a tangible improvement of living conditions.

The Handbook of Alabama Agriculture is now in its third edition. Prepared by the state extension service in cooperation with the U. S. Department of Agriculture, it is a simple, practical and comprehensive guide to the application of science in all phases of land use and management, including farm forestry.

Industry also is assuming greater responsibility toward resource education. Recent technology, instead of developing substitutes which make



Boys in the junior high school at Anderson, S. C., plant pine trees, build a terrace and a meadow drainage in a sandbox.



Evelyn Jones (right), teacher in the high school at Greenville, S. C., describes contour farming as shown on a poster prepared by her pupils.

us less dependent upon the soil, is requiring the products of the soil in ever increasing amounts. Obviously, the supply of raw materials cannot be maintained without conserving and improving the soil and improving the status of the people

The progress of chemurgy—the processing of fibers, oils, starches and other farm products—has been notable throughout the South and the effects of this are reaching back onto the individual farms. Commercial users of wood not only are practicing scientific management on their own holdings but are encouraging it on farm woodlots as well.

The long growing season and abundant water supply of the South are favorable to dairying and the raising of beef cattle. This in turn involves pasture improvement through fertilizing and the selection of better strains of livestock. Dairying requires higher standards of sanitation, cooling facilities and electric power. One of the striking phenomena of the South today is the evidence of local leadership by individuals in encouraging pasture improvement.

It is not an uncommon experience to cross a parish or county line and note an immediate change in pasture quality. Inquiry will show that a local banker, extension worker or teacher has been responsible for the use of lime and phosphate. I have seen grade A milk in production on farms which less than a decade ago were covered with pov-

erty grass and with broom sedge.

Viewed broadly, the changes which have been described amount to much more than adroit trouble shooting through the use of science. They represent instead the application of a solid system of principles drawn from the science known as ecology.

These are the principles I have attempted to outline in an article entitled "Man and Nature in the Modern World," published in the report of Gatlinburg Conference II, and distributed in reprint form by Friends of the Land, Columbus, Ohio.

The gist of these principles lies in the fact that man is inseparable from his environment and subject to its great laws. He uses this environment and changes it by his way of life or, more technically speaking, the form of his culture. Every human culture must conform to the laws of nature or destroy itself. It is dangerous folly to talk of man's conquest of nature or even of his control of nature. What he can do is to study nature and then control himself in accordance with his knowledge.

The application of science thus becomes not a matter of tinkering with certain mechanisms but of changing the way in which people live, in short, of modifying their culture. Because any culture is an organic growth, its history and organic qualities must be reckoned with by those who would see it modified.

The process is not like that of wrecking a building and putting the bricks together into a different structure. It is more nearly like the problem of training a tree into proper symmetry. That is why the South must depend upon authentic southern leadership which can work in terms of its own culture.

Any process in nature, simple or complex, tends to work toward a condition of equilibrium. The efficiency of land, water, atmosphere and living organisms in contributing to human survival depends upon a proper balance among all of these factors. Science can be so applied as to destroy this balance. It can also be used as a sort of accountability to guide man in achieving the most favorable interplay of energy, materials and his own activity. In the last analysis, regional reconstruction is a matter of human behavior, and I can see this principle being applied in the South today.

Because this movement is region-wide, credit must be widely shared. Odum, Vance and Ivey at Chapel Hill have certainly done much to give it coherent expression. So have similar groups elsewhere, often with the vigorous assistance of journalists and political leaders. The powerfully centralized state administration of Louisiana is active in reshaping schools and colleges under its guidance. Happily, no one seems too much concerned about who gets the glory. Such is public service in its highest tradition.

JEWISH ATTITUDE TOWARD RELIGION IN SCHOOLS

Jewish people feel that the teaching of religion in the schools, in whatever way it is done, infringes upon the democratic principle of separation of Church and State

TWO RECENT DEVELOPMENTS HAVE brought the relation of religion to public education to the forefront, namely, the spread of released time for religious instruction and the demand for government support of private and parochial schools. But this question has other facets, such as religious observances in the public schools, interfaith or intercultural programs and the teaching of non-sectarian religion.

The minority groups—religious, cultural and ethnic—are keenly aware of these recent developments and deeply concerned with their implications for the American way of life, for the public school system and for religious education itself. The American Jewish population, being a minority group characterized by religious, cultural and ethnic distinction, is now engaged in discussing every aspect of this important problem. In fact, the Jewish group is more seriously perturbed, perhaps, than are other groups.

SEE DEMOCRACY IN DANGER

The Jews have found a secure haven in the United States and they have become part and parcel of the new American civilization. They have accepted the principles of separation of Church and State as one of the foundations of the American democratic society which has given them this sense of security as well as the opportunity for sound integration into the American structure and pattern. With the deep wounds inflicted on European Jews, 6,000,000 of whom were murdered by antidemocratic forces, still fresh in everyone's memory, the Jews of America are naturally most anxious for the safeguarding of the bulwarks of democracy in this country.

Reading from the Scriptures, recitation of prayers and celebration of Christmas in the public schools are religious practices which few have challenged until recently. These

BEN M. EDIDIN

Assistant Director, Jewish Education
Committee of New York

common practices, because of their possible effect upon Jewish children as well as because they are infringements on the principle of separation of theological religion from public education, have presented to the Jews a serious problem right along.

What should Jewish parents tell their children who are attending a public school where the Lord's Prayer is recited as a matter of course? In all fairness, they must tell them that it is part of the Christian liturgy and is not a Jewish prayer. Does participation in this period of worship, then, mean participation in Christian worship? If a Jewish prayer were read, would it not mean that Christian children would be involuntarily taking part in Jewish worship?

The celebration of Christmas confronts the Jewish child with a more difficult situation. At home and in the Jewish school, Jewish children are taught to respect the religious beliefs and practices of their Christian neighbors; they are taught that Christmas is the most sacred of all Christian holy days. The same children are being asked in the public schools to sing Christmas carols, take part in Christmas plays and share in other activities related to the occasion.

Jewish parents who tell their children that Christmas is merely an American national holiday are being disrespectful to Christianity and misleading their children. Some claim that Christmas celebrations and other religious observances in the public schools are having a proselytizing influence upon Jewish children.

Even the recent introduction of joint Christmas-Hanukkah (Festival of the Maccabees) programs and other interfaith or intercultural activities into the schools is being ques-

tioned. While there is no adequate information as to the effect of these programs on both Jewish and Christian children, they no doubt serve to give Jewish children a feeling of recognition and status and to enlighten Christian children about Jewish observances.

Nevertheless, the holding of such programs actually means the introduction of more religion into the public schools. Intercultural education is badly needed but it can perhaps be better achieved if it is not linked with religious observance but is included in the social studies.

RELEASED TIME NOT FAVORED

The problem of released time for religious education, because of its rapid growth in recent years, particularly in New York City where two fifths of our American Jews reside, is at the moment receiving even more serious attention by Jewish groups throughout the country. The problem is sharpened by the fact that so many Catholics and Protestants seem to view released time as an effective instrument for the religious education of their children.

To oppose it, therefore, might give the impression that Jews are standing in the way of their Christian neighbors in the achievement of what they consider to be a worthwhile purpose. Then, too, all Christians are not unanimous in their attitude; some are definitely opposed to released time. Jews often find themselves in the position of having to take sides with one of the conflicting groups.

Jewish public opinion is on the whole unfavorable to released time because it is considered an infringement on the principle of separation of Church and State. Moreover, most Jews see in it little value for the education of their own children, while many view released time as a possible threat to the existing system of modern Jewish education.

The Jews have their own curriculum which cannot possibly be taught in one hour a week. It includes the Hebrew language, Bible, Jewish history and literature, contemporary Jewish life, as well as religious values and practices. Even the existing daily afternoon schools do not succeed in covering the curriculum adequately. At best, released time can serve merely as a corridor for the enrollment of pupils in the daily afternoon schools or in the Sunday schools. Some even argue that parents might accept released time as a substitute for the more intensive forms of Jewish education and thereby undermine the present schools.

In communities where Jews take advantage of released time, there is

great concern over certain abuses of the law permitting children to be released for religious education. These abuses include recording of attendance by the public schools; segregation of pupils by religious groups when they are dismissed for religious instruction; dissemination of information about released time in the school by the principal and teachers and in some instances by clergymen or religious teachers, and, most important, the holding of released time classes on the public school premises. These and similar practices make of the public school an active agent in the furtherance of religious education.

A third aspect of the complicated problem of religion and public edu-

cation is the support of parochial schools by governmental agencies. Jewish opinion on this question has not as yet crystallized to any extent. Jews have conducted few parochial schools until recently and even today no more than about 12,000 children are enrolled in all the Jewish day schools in the country.

Some of these schools, as in New York City, have availed themselves of free transportation, food subsidies and health services offered by governmental agencies. It is doubtful whether Jews would advocate any more direct support of their parochial schools from federal, state or municipal funds.

Finally, there is the question of teaching nonsectarian religion in the public schools being advocated as a way of giving our children an education which would include the religious values and concepts and contribute toward their character growth. The important questions here are: (1) whether there is such a thing as nonsectarian religion; (2) whether religion can ever be taught objectively by any person who has religious convictions; (3) whether it can be taught at all without the emotional and ceremonial aspects. Religion is not a matter of facts; it is an area of human living which involves deep convictions, strong emotional feelings and concrete ritualistic forms of expression.

The current awakening to the need of religious education as part of the total education of our children grows out of a deep dissatisfaction with the present state of moral and ethical values in our society. However, any efforts to fill this basic need must be so conceived and so guided that they will be in harmony with the basic principles of American democracy.

Difficult as the task of the religious educator is, he will, perhaps, in the long run attain his goals more effectively by developing the religious school as a voluntary school, by emphasizing religious instruction as the responsibility of the home, the church and the religious group. Any attempt to utilize the public school and the government as compulsive aids and instruments to further religious education may prove a boomerang, serving to undermine our cherished public school system and perhaps the very foundation of American democracy.

Businessmen Advise Pupils

JAMES C. ALDRICH

Guidance Counselor, Hancock Central School, Hancock, N. Y.

THE ROTARY CLUB OF HANCOCK, N. Y., gave the pupils of the Central School an insight into many vocations by sponsoring a vocational program at the school as part of its regular weekly meeting. This program consisted of luncheon in the school cafeteria followed by discussions in groups led by Rotarians.

The philosophy of the program was centered upon the pupils, the Rotarians and the school itself. Boys and girls were given a chance to hear, meet and discuss their occupational interests with persons in the community who were successful in their particular occupations. The program was pointed toward the pupils of grades 8 to 12 in order to arouse their interest in occupations, to show the diverse community opportunities available and to stimulate them to focus their present education on their future plans and their future requirements.

The boys and girls were intensely interested in the program and were more enthusiastic over the discussions than they had been over any previous assembly or similar activity. They were talking occupations for days ahead of time. This "talk up" was further boosted by the showing of two occupational films during the

week before the meeting with the usual accompanying talk by the guidance counselor.

The most important immediate gain, and one that was carried over into the long range results planned, was the deep impression made on the pupils by this invasion of the school by the "big business" men of the community. It led to a deluge of talking among the pupils about the activities in the various sections and in their own sections and to the comparing of notes on educational qualifications, salaries and other aspects of occupations.

The program required much planning, that is, planning with the cafeteria help and the homemaking department for the luncheon, rescheduling the cafeteria sittings so that there would be no confusion and the filling out of questionnaires by the pupils so that room assignments for the various sections would provide adequate seating space.

Since many of the Rotarians were unfamiliar with public speaking, the guidance counselor mimeographed a summary of the principal points each speaker should explain in describing his occupation to a young person wishing to know about it as a vocation for the future.



In an experiment with adolescents originally classified as feeble-minded, I.Q.'s were improved, social adjustments made and the majority became gainfully employed.

CONSERVATION OF HUMAN RESOURCES

BERNARDINE G. SCHMIDT

Acting Director, Special Education Clinic
Indiana State Teachers College, Terre Haute

DEFECTIVE ADULTS ARE, IN GENERAL, defective children who have matured chronologically. They include the physically defective, the socially defective (or delinquent and criminal) and the mentally defective. In terms of numbers, the last group includes more than the total of the other two.

In 1940 there were 98,000 children of school age who were so defective mentally as to be in need of special education facilities and another 22,000 who were placed in special residential schools and institutions. It is estimated that 7 per cent of the school population is so handicapped mentally as to be unable to profit by instruction in regular classrooms.

What can be done for these boys and girls? State institutions carry them as burdens on the public budget and are taxed beyond their physical capacities to care for them. Families who might want to house and care for such children and would sacrifice so that their needs might be met do not have the knowledge of how to provide a rounded social program to prepare them satisfactorily

Part I

for living in a free community. Since the public schools are charged with responsibility of educating all children, to them seems to fall the challenge of rehabilitating mentally defective children for civic competency.

In 1935 an experimental program was developed in the Chicago public schools for adolescent boys and girls who had been originally classified as feeble-minded. Despite the fact that these children had mental deficiencies which would qualify them for admission to institutions for the seriously mentally handicapped, special centers were planned for their education on the hypothesis that some kinds and levels of competency might possibly be developed in them.

In the experimental group were 254 children ranging in age from 12 to 14 with I.Q.'s of 27 to 69 and a mean I.Q. of 51.7. Their intelligence measurements were obtained from clinically administered Binet tests; case study data for these children

included at least two such tests (and as many as four) prior to placement, in addition to extensive family, educational and medical histories. Study was made of their psychobiological and predicated needs and a program of education was planned.

The educational program had the following goals: (1) development of desirable personal behavior; (2) improvement in fundamental academic skills; (3) development in the manipulative arts; (4) improvement in work and study habits; (5) acquisition of occupational and related vocational information, and (6) pre-employment experience.

The instructional method was characterized by: group planning, group experience, in-school reproduction of situational experiences, creative and manipulative arts.

Learning experiences, or the curriculum, were selected from the everyday activities of children of the same age group in the family and community. If it was accepted that these children might attain even a slight measure of social competency,

then it became necessary to develop a program which would provide opportunities for them to learn at least the simple skills of social interaction and to develop concepts and attitudes for group living.

Two of the competencies which distinguish normal family life in the community from communal living in an institution are vocational aptitude and occupational adjustment. Employment serves two purposes in the behavior pattern of individuals: (1) it provides an opportunity for satisfying the basic need for a feeling of importance or contribution to the group and (2) it provides monetary compensation to be used by the financially self sufficient individual to "pay his way." Both these purposes are equally important in the development of acceptable social behavior and a social personality.

With a goal of vocational training as part of our major educational aim, these boys and girls needed to be guided through uncharted paths starting from almost complete illiteracy. At the inauguration of this experiment only five of the children could read their own names in print, none could write legibly and their skill in number concepts was at the first grade level.

CHILDREN NOT ORIENTED

At the time the special centers were begun, it was felt that one of the most immediate and pressing of social needs for all the children was a sense of orientation and direction. The children were found to be unable to deliver simple messages and to return with equally simple responses. Most of them had no familiarity with their immediate neighborhoods and could not find their way to the corner stores and the nearby parks.

The children came from an area of 64 square miles and one of the requirements was that they must come to school unattended by adults. This was the first step in breaking the crutch of dependence and building up self responsibility.

To effect this change the special centers accepted the implied task of teaching the boys and girls how to use the public transportation they required, how to find their way around the city and how to locate and use special sections and public services in the metropolitan area. Thus, the first unit of work devel-

oped was "Finding Our Way Around Chicago."

Soon interest ran high in "how we can reach our friends without using transportation." Discussion of other types of communication was the incentive for "Wires and Bells," a study of telephones, the telegraph and the mails. And in succession came such units as "Can I Help You?"—a study of stores and how to use them; "Let's Dine Out," devoted to lunchrooms, cafeterias and restaurants; a vocational occupation survey entitled "Chicago Goes to Work," and a final unit, "Americanism and Democracy," devoted to fundamentals of civic responsibility and the duties of good citizenship.

REAL LIFE ACTIVITIES STUDIED

In developing educational methods, the actual reproduction of real life activities was used to bring into the classroom situations from the outside community. The dramatization of such situations gave the opportunity to meet and study problems inherent in the activity itself. Various instructional aids, both visual and auditory, were used, including field trips, radio broadcasts, films, slides and maps and newspapers.

The experiment continued for three years, while an evaluation period, which was started at the beginning of the program, continued for another five years, making a total eight year period. Evaluation measures used were those utilized when the pupils entered to determine the needs of the group. They included Binet retests and academic achievement batteries as well as measures of personal and social development and emotional maturity.* In addition, records were kept of the pupils' vocational, academic and civic activities and all cases were cleared with the Council of Social Agencies.

At the close of the eight year study, it was found that slightly more than 27 per cent had completed a four year high school course, and more than 5 per cent had continued post high school training. A total of 83.4 per cent was employed: one third in skilled occupations and another third

in clerical positions. More than 6½ per cent were in managerial positions and another 5 per cent were in inspection posts, where they were responsible for other workers. Their salaries ranged as high as \$84 per week with a mean salary of \$32.

A study of occupations in which these individuals were placed showed such positions as registered nurses, blueprint draftsmen, research librarians and credit manager of a large retail department store. More than 5 per cent were in military service.

Retests of intelligence showed a range of change in I.Q.'s from 4 points dropped to 71 points gained, with a mean overall change of 40.7 I.Q. points for the entire group. Of the group 80.7 per cent exceeded a gain of 30 I.Q. points; 59.3 per cent reached or exceeded a gain of 50 points. By the end of the study 59.7 per cent of the group were classifiable as low or high normals; only 7.2 per cent were still feeble-minded. By measures of emotional maturity and social adjustment, 79 per cent were shown to have attained a level of personal and social adjustment equal to or better than the highest one fifth of well adjusted adults.

RESULTS IN CONTROL GROUP

For purposes of comparison, at the beginning of the study a control group had been matched with the experimental, on the bases of chronological age, initial intelligence, number of years of school experience, initial academic achievement and socio-economical status. In these groups the controlled variable was the educational program itself. However, in this control group little change was found in any of the areas investigated. Retests of intelligence showed a range of from 4 points gained to 22 points lost, but mean I.Q. changes for the control group showed a drop of 3.6 points.

Such results give a factual basis to the hypothesis upon which the experimental program was developed. Further research is needed in the adaptability of the plan to other locations and by other personnel and is now under way.

However, these results alone show the development in competencies for 254 children who are now productive members of society rather than social liabilities in institutions, a rôle originally predicted for them by a static type of psychology.

*These tests, as well as specific technics of evaluation, are treated in critical detail in the full report of the study, *Changes in Personal, Social, and Intellectual Development of Children Originally Classified as Feeble-minded* (Psychological Monograph), published by American Psychological Association, and in press.

GOOD MANNERS ARE IMPORTANT

They grease the wheels of everyday living.

Most children want to know "what's proper"

CLARICE COX

Teacher, Imperial Public Schools
Imperial, Neb.

ETIQUETTE AS A STUDY IN HIGH SCHOOL is usually relegated to the home economics class or to the clubs. This means that a large group of pupils is missed. The boys frequently feel a need for a knowledge of good manners but they would never admit it or openly seek out a group in which etiquette is taught. There are always girls who are left out, too, probably some whose need is the greatest. It was decided in one small Western town recently to reach all the young people in the school by making etiquette part of the work in the English class.

MOST LIKELY NEEDS STUDIED

Pupils were free to look up in the books assembled for the work any matters of etiquette they wished to know about, even proper behavior at a formal ball, but classroom procedure included instruction in those things which were needed for correct behavior in their own community. With this down-to-earth basis firmly established, pupils were asked to volunteer suggestions as to the situations which should be considered. These fell into various groups as follows.

1. Amusements, including proper behavior at dances, parties, movies, sports and on dates.

2. Travel, including a knowledge of how to act on trains, buses, planes and automobile trips. Tipping procedure and dining away from home were also considered.

3. Family life, including the show-

ing of consideration for others at home, writing letters, using the telephone and radio.

4. School, church, street and public buildings were grouped together for convenience in discussing other situations the young people were likely to meet.

The class was divided into four groups, each made up of boys and girls. Special emphasis was placed on situations sure to come up in the community and latitude was allowed in case of conflict with local customs. For example, it was conceded to be all right for a girl to accept an invitation to dance without a previous formal introduction since the local dances were community affairs. However, it was pointed out that such action would not be a good idea in a nearby city where the population was large and shifting and the dances were not of a family type. Local custom can be carried too far in such cases, the amusement committee decided.

Girls pointed out that telephoning procedure could be improved upon. For a boy to ask, "Whatcha doing tonight?" before stating his idea for the evening's entertainment put the girl on the spot, since it forced her to accept or to refuse before know-

ing what he had in mind or to embarrass him by backtracking after the offer was made.

From discussion of these and similar situations the pupils arrived at the conclusion that etiquette is no more than a mixture of common sense and consideration for others. It was also deduced that good manners are not static but fluid. What was *comme il faut* yesterday is strictly unnecessary today in some cases. The members of each group drew up regulations applicable to themselves and adapted to their own times and customs. Reference was made, of course, to standard books on etiquette which were kept on hand. Current magazines of the teen-age type and sections of others were found to be an excellent source of up to date material on behavior.

One pupil suggested that a question box be used and the idea was enthusiastically accepted. Questions were sorted and given to the committee heads who led class discussions. The teacher acted only occasionally as a referee or suggested relevant material and sources. It was found that questions of morals came into the anonymous questions, such as, "Should a girl kiss her date good night?" These subjects were handled in a matter of fact way. Current magazines were useful as an impersonal authority, one that the young people would accept in preference to a parent or a teacher.

HANDBOOK OF BEHAVIOR PREPARED

Before the course was finished an acceptable code of action was assembled in each section by the pupils themselves. The points were well made and logically arranged as a sort of handbook for behavior.

Skits were written and acted out to dramatize some situations and make the points of conduct more obvious. Situations were presented in both the right and the wrong styles, the wrong way being presented first. This provided an opportunity for humor and variety. Among the subjects dramatized were introductions, telephoning for a date, asking for a dance and rooting at a basketball game.

The project was successful in that it made etiquette a modern study, one from which the average high school pupil could derive help in dealing with situations in which he found himself.



Should Teachers Strike?

WILLARD B. SPALDING

Dean, College of Education, University of Illinois

THE QUESTION AS TO WHETHER TEACHERS should strike may seem academic in the light of the number of strikes which have occurred and have been threatened during the last school year, and yet the fact that they continue to occur warrants renewed consideration of the problem. Teachers seem to use the strike in order to improve their earnings, in spite of public opinion against this type of action and some legislative restrictions.

NEW YORK STATE HAS LAW

The Coolidgean principle that the right to strike against the public safety does not exist has been expanded by some persons to mean that no one employed by the public can strike. This has been enacted as the law of the State of New York with drastic penalties for its violation. The discussion in the press and on the floor of the legislature indicated a fairly widespread belief that strikes of publicly employed persons were against the public interest. This article of faith needs critical examination before it receives a final blessing.

It is obviously to the public interest to get and retain competent persons in positions of responsibility. Modern government demands a high level of ability to perform the tasks assigned, whether they be in the sanitary department, the schools or the F.B.I.

One of the important factors in determining the choice of occupation by individuals is the amount of money coming in each week to pay bills. If this is too little to support the employee's family, he has the choice of seeking more pay or of seeking other employment. If he chooses the latter course, and 350,

000 teachers have chosen it in the past few years, then the number of competent persons in public service is decreased. This is not in the public interest.

If the publicly employed chooses to press for more pay, then he can do so only by polite representation and courteous requests. These procedures are obviously doomed to failure and so he is driven to seek other employment on either a part time or full time basis. In either instance he is not giving competent service to the public. The right to strike, if used, might well lead to an improvement of rates of pay and a consequent attraction to and retention in public service of better persons. This is in the public interest.

Teachers are a special kind of public servant since they aid in the development of better citizens through their work in schools. The children of our nation need better instruction than can be given by thousands of unqualified persons who now fill more than one fourth of our classrooms. The nation needs better citizens than can be turned out by schools that are so poorly staffed.

IF IT COULD DO THESE THINGS

The immediate and long range problems before society are too vast and too complex for those to handle whose schooling has been grossly and unnecessarily inadequate. If the strike would help to get and keep the kind of teachers who could produce a generation capable of creating a better world, it should be encouraged. It would help if it could produce higher rates of pay and better conditions of work.

Before concluding that the strike should be included as part of the collective bargaining rights of public

employees because it would tend to raise levels of pay and so increase the number of capable persons in public service, it is well to examine the issue farther in order to discover whether it will do this.

The strike is generally recognized as a legitimate part of collective bargaining in industry, although it is used only as a last recourse after all efforts to obtain agreement have failed. It has usually had some moderate degree of success because it has been directed against those out of whose income wages are paid. The company which owns the tools of production and the buildings in which they are housed can, within limits, adjust its income to the demands of its employees. If it cannot do this, it can cease operations. These two alternatives are not usually open to governmental units and political subdivisions.

INCOME USUALLY LIMITED

A school board, for example, usually has a limited income even when it is fiscally independent. Its power to tax is restricted by the laws or constitution of most states. When this power is used to the limit, the school board must turn to the people for additional revenue.

Most other governmental agencies are in the same or a more difficult situation. Whatever their desire to raise wages or to improve conditions, they cannot do so unless money is made available to them. If their employees strike, they are usually powerless to do anything to alleviate the grievances which led to such drastic action. Under these conditions the only recourse of the employing board or agency is to take the issue to the voters or to an appropriating agency. The strike has

then become a political weapon rather than a part of collective bargaining. As such, it has a long record of being almost completely unsuccessful.

The recent strike of teachers in St. Paul is a typical example of the weakness of this type of action as a means of influencing the popular vote. One of its immediate results was the submission of a charter amendment to the citizens, which was defeated and which lost most heavily in those wards with the largest labor vote. Instead of gaining by the strike the teachers apparently alienated most of those members of organized labor who would usually have supported their cause. No increases in pay resulted.

In Buffalo, where the other strike in a major city occurred, the teachers did get some pay increase, but their action, taking place at the time the legislature was in session, precipitated other action. New York now has a law prohibiting strikes of public employes under drastic penalties. Here, again, the use of the strike produced greater loss than gain.

WHEN USED AS POLITICAL WEAPON

In each of these instances the strike was used primarily as a political weapon rather than as an instrument in collective bargaining. In each instance it was notably unsuccessful in improving the total lot of teachers. The use of the strike did not produce those improvements in pay and in working conditions which would tend to attract and hold competent persons as teachers in St. Paul and Buffalo. It did, in at least the latter city, produce less desirable conditions for all public employes in an entire state. Its net effect, therefore, must be judged as against the true interest of the whole people.

It has been pointed out in the foregoing that the employing board is usually unable to provide money for raising wages without a vote of the people or of an appropriating body. In a few instances this has not been so. The so-called "strike" in Norwalk, Conn., which was really a refusal on the part of the teachers to sign unacceptable contracts, is an illustration of this kind of situation.

Apart from the fact that these teachers were not on strike, since they had been tendered and had refused contracts several weeks before

the beginning of school in September, their refusal to work did produce better pay. This was possible because the employing board had available resources which could be used. Here is an instance in which a strike, if there had been one, could have produced the better pay which would get and keep competent teachers in the schools.

THESE STRIKES ARE LEGITIMATE

Such a strike would have been part of collective bargaining and not a kind of political weapon. In every respect it would have been in the public interest. It might well be argued that strikes by public employes, when directed against boards or agencies which have available money which they do not choose to spend to improve wages, are a legitimate part of collective bargaining and should not be forbidden.

Even if teachers' rights to the strike as a part of the procedure of collective bargaining with employers who have funds are granted, while they are denied when the strike becomes a political weapon used to influence an election, the larger issues raised by this denial must be met. It is obvious that teachers, like other public employes, are not slaves. They can quit individually, if not collectively. They can also spend precious energy in part time work, thereby lessening their efficiency. They can discourage others from entering their profession. All of this is against the public interest and is actually occurring daily.

Teachers, like other employes, observe the strength of organized labor in collective bargaining with employers. They see the rights of unions recognized by the laws of each state of the nation. They see special boards set up to ensure the protec-

tion of these rights. They see tribunals (such as the N.L.R.B.) which protect the rights of employes to fair treatment. They see all this and much more in industry but they observe also that the government for which many of them work, while zealously protecting the rights of workers in industry, refuses to raise their pay on the one hand and denies them the right to strike on the other.

It is time that the rights of public employes and the duties of the governmental agencies or political subdivisions which employ them be re-examined in the light of modern knowledge of good labor relations. Denial of the right to strike deprives teachers and others of an instrument which labor has found to be extremely effective in the relatively few instances where used.

QUESTIONS TO CONSIDER

What can be given teachers in its place? Can they be placed under the jurisdiction of the N.L.R.B.? How could such a board make a unit of government follow its decisions? What is sound public policy toward the ways in which public servants should seek and get better pay and working conditions? As Dr. Alfred Simpson of Harvard has pointed out, it may be well to reexamine as well the issue of the use of the strike in the light of the total situation for public employes.

The questions which are raised here and many others like them need to be considered by students of government, by labor leaders, by organizations of teachers and of other public employes, by legislative bodies and by all citizens. Out of this study and consideration should come a new and better policy for labor relations between workers and the governmental unit which employs them.

WRITE FOR YOUR VOLUME INDEX

If you bind your volumes of *The NATION'S SCHOOLS* you will want the index to Volume 39, covering issues from January through June 1947. Continued paper shortages prevent its publication in the magazine. Send requests to 919 N. Michigan, Chicago 11, Ill.

THE COMICS Can Do It Better

IVAH GREEN

Supervisor of Rural Education, Department of Public Instruction, Des Moines, Iowa

PROGRESS IN EDUCATION IS SLOW BECAUSE up until now we have not had all the answers. But now, bright as an airport beacon, comes the solution to our problem of how to make learning painless and lasting. The method is so simple that we wonder how, like Mortimer Snerd, we could have been so stupid.

All we've needed to do is to introduce comics into our high schools.

It is not yet too late to change our ways. I have on my desk an initial effort made by courageous pioneers in the field of promoting comic books for senior high school instruction. Why didn't more of us think of this before?

The name "comic book" has been artfully changed to "picture story," a quaint and heartwarming touch. The paper on which it is printed is soft and easy to handle. The pictures are brilliantly colored and only a trifle blurry. A minimum of words is used so that the reader can get to the point of the story quickly.

Only a part of the words enclosed in nice neat boxes are so small as to need extra scrutiny. Many of them are printed in extra bold blackness for emphasis. Five or more pictures to a page allow for more action and fewer words to read. Characters go from modern times back to cavemen and up to the present in one page with no effort at all.

The merits of a picture booklet in introducing a topic for study are twofold, we are told, namely, its popular comic style and its simplified language. While an outline for study is included, that is only a secondary contribution. Interest on the part of high school seniors is practically guaranteed if teachers obey the injunction to present each pupil with a picture booklet to be read "just for fun." It can even be sent home as "homework" or be used for a "reading period in class."

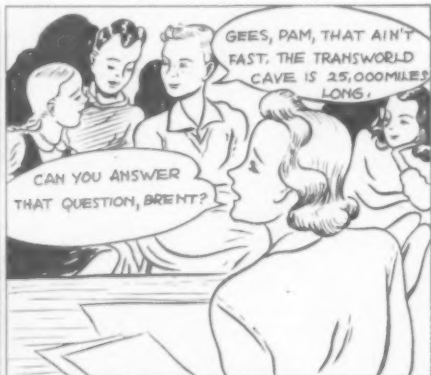
We blush with mortification as we recall the years we have spent in fruitless efforts to make certain re-

quired subjects interesting to pupils but during which we never had the sense to motivate such study properly with a comic book.

Our art and English courses in college should have paved the way for the inevitability of comics as a means of bridging some kind of gap that we are assured exists and that the picture booklet is now prepared to fill. Oh, to think of all the wasted years we teachers have spent without this device! That we are not a nation of nitwits must be only a miracle which we are too depressed to ponder upon.

However, let's not waste time in bemoaning our blindness and being too late with too few picture booklets. If we hurry and have the will to do so, we can proceed at once to rectify the situation. Let every publisher of textbooks hire the best comics artist he can find. Let him buy up carloads of that soft, thin paper so easy to print color on, and let him not spare the colored ink.

Let every writer of text material look to his laurels when it comes to packing in a "box" the fewest words with the most compelling interest-arousing content. Let him strain his imagination to the cracking point to weave together the most breathtaking conglomeration of persons and incidents he can conjure up. Let him not forget the love interest or the narrow escapes. Let "pleasurable reading" be our goal!



DURING 1946 AND EXTENDING THROUGH the period of the 1947 session of the state legislature, a new system of school finance was planned and enacted into law in Utah. The changes involved two amendments to the state constitution and the enactment of statutory provisions to implement the program and provide for its being put into operation.

At the outset the intention was further to equalize the opportunity for education and the burden of its financial support. The first step in this direction was made by legislation enacted in 1930 at the time the equalization fund was established.

AMENDMENTS INVOLVED

The second step was taken in 1937 with the institution of the uniform school fund. Both of these changes involved constitutional amendments. However, until the time when the recent alterations were carried out, no attempt had been made to disturb the distribution of the old district school fund or the high school fund.

Prior to the 1946 amendments, the constitution provided four separate school funds, the amounts of each and their distribution being as follows:

1. **District School Fund** (effective in present form since 1921): Limited to \$25 per child between the ages of 6 and 18 years, enumerated on the basis of the school census and distributed to local districts according to the number of school age children residing in the district.

In aggregate, this fund amounted to approximately \$3,700,000 annually. The revenue consisted of 75 per cent of the proceeds of the personal income tax and the corporation franchise tax, with whatever balance was necessary being raised by a statewide property tax levy.

2. **State High School Fund** (effective in present form since 1921): Limited in amount to the proceeds of a 0.2 mill statewide property tax, aggregating about \$130,000. Distribution was left to legislative action. Prior to the recent changes, however, this money had been distributed to local districts maintaining high schools on the basis of the number of pupils under 18 years in grades 9 through 12 who were enrolled for twenty weeks or more.

3. **Equalization Fund (1930):**

UTAH Revamps Its School Financing

DRAYTON B. NUTTALL

Assistant Director of Research and School Finance
Utah Department of Public Instruction

Limited to \$5 per child on the basis of the school census. Distribution was left to legislative action and has been on the basis of an equalization formula, the same as that to be described for the uniform school fund. Since the institution of the latter fund, the revenue for the equalization fund has come entirely from the levy of a statewide property tax.

4. **Uniform School Fund (1937):** No constitutional provision existed regarding the amount of this fund and its distribution was left to the legislature. In 1945-46 the fund aggregated \$2,698,000 of which \$2,311,000 was a legislative appropriation from the general fund of the state and the balance was from miscellaneous constitutionally dedicated sources, such as interest on the permanent school fund, income from school lands and proceeds of the mineral royalty act.

AMOUNTS INSUFFICIENT

This fund, together with the equalization fund, was distributed to districts to provide, presumably, \$3000 a classroom unit (see discussion of units to follow) after first deducting the amount any district would receive from other state funds and from a 10 mill levy on the property assessed in the district. (The 10 mill tax need not have been levied but was used only in calculations.) The amounts have never been sufficient to provide \$3000 and the funds going to local districts have been proportionate, averaging in the best year (1945-46) approximately \$2800 a unit.

One of the amendments enacted in 1946 placed all revenue from the income and franchise taxes in the school fund. The second amendment freed all state school funds from constitutional limitations as to amount and method of distribution. These two amendments were passed primarily on the proposition that

the amounts to be distributed from state funds would be increased and that all money in state funds would be distributed on an equalization basis.

TWO JOBS FOR LEGISLATURE

This left to the legislature two jobs. The first was to define the minimum program of education to be maintained in all districts of the state.

The second job was to determine the amount of money which would be provided per unit of cost as defined in the minimum program. The combination of these two items in relation to the ability of a local district to finance its own program (on a base uniform local levy) determines the amount of money to be distributed from state funds.

The newly enacted provisions retain the cost unit concept contained in the old provisions relating to the equalization and the uniform school funds, i.e. the classroom unit. However, some changes and additions have been made in the method of determining the number of such units to be used to distribute funds to local districts. The new method provides that a district be credited with classroom units in accordance with the following:

1. One unit for each 50 pupils in A.D.A. in kindergartens (previously 60 pupils).

2. One unit for each 30 pupils in A.D.A. in elementary schools (grades 1 to 6 or 1 to 8 depending upon the organization; previously included all grades 1 to 8).

3. One unit for each 20 pupils in A.D.A. in secondary schools (grades 7 to 12 or 9 to 12 depending upon the organization; previously included only grades 9 to 12).

4. Up to one unit per teacher in schools so situated that circumstances make it impossible to maintain the foregoing ratios and still offer an acceptable school program. (Local

boards of education must apply for and receive special approval of the state board of education for such schools; previously such approval applied only to one and two teacher schools.)

5. One unit for the first professional person assigned full time to nonteaching services (superintendent, assistant superintendent, supervisors, supervising principals, counselors) and one half unit for each one in addition to the first. (No recognition for this in former law.)

6. One third of a classroom unit for each vocational agriculture or vocational home economics teacher employed on a twelve month program. (No recognition in former law.)

The bills passed by the 1947 legislature provided that on the basis of units determined in this way each district would receive \$3300 per unit. In addition, each district would receive its pro rata share of a transportation fund of \$675,000, distributed on the basis of the average daily miles that pupils are transported. Pupils to be counted for transportation reimbursement are those in kindergarten through grade 6 living $1\frac{1}{2}$ miles or more from school and those in grades 7 through 12 who live 2 miles or more from school. (The old law allowed only \$500,000 to be distributed on the basis of the number of pupils transported $2\frac{1}{2}$ miles or more.) No district, however, may receive more from the transportation fund than it actually spent for that purpose during the preceding year.

MINIMUM TOTAL COST

The total cost of the minimum school program on this basis is estimated to be, for the 1947-48 school year, approximately \$18,500,000. This must be used for current operating purposes and compares with total expenditures for the same items of \$15,587,966 in 1945-46 and an estimated \$16,250,000 in 1946-47.

To raise the \$18,500,000 for 1947-48, the state fund (a single fund now) must supply the balance needed after the application of a uniform base local levy. This base local levy is determined to be that rate required to raise locally the entire minimum program in the district having the highest assessed valuation per pupil in A.D.A. and on this basis may vary from year

to year. For 1947-48, for example, the estimated relationship of state to local funds in financing the minimum program is:

Total	\$18,500,000	100%
Base Local Levy		
(aggregate)	6,750,000	36%
State Funds	11,750,000	64%

The amounts from state funds are guaranteed from year to year by the provision that any deficiency one year be added to the amount for the succeeding year and the revenue raised accordingly.

In the matter of setting levies, the law requires that the state tax commission determine the rate of the base local levy and this is automatically set without local consideration except that, if it is not levied, the local district does not participate in state funds.

The important matter of whether or not equalization of assessment valuations has been made is left for the state tax commission. In cases in which local county assessors have not followed statewide policy, the distribution of state school funds is reduced and the local levy is automatically increased to compensate so that school funds may not be impaired.

MATTER OF LEEWAYS

District boards of education may operate an educational program costing in excess of the minimum program established by the legislature. This local leeway is limited to an increased current program cost equivalent to 30 per cent of the minimum program, provided no district shall be limited to a leeway of less than 6 mills.

However, by a majority vote of the people in the district voting at a special election for the purpose, it may be raised to 40 per cent above the minimum. Any funds raised in excess of the minimum program may be used for any purpose, including capital outlay and debt service. However, each district board may raise an amount in addition to any current operations limits equal to 10 per cent of the minimum program for capital outlay. The funds necessary to service a bonded debt may be raised in addition to any other limitations, if necessary.

The sources of revenue for the state fund are set by the constitutional amendments. These sources are: (1) the proceeds of the indi-

vidual income tax and the corporation franchise tax, (2) any other funds which the legislature may provide and (3) a statewide property tax to supply any needed balance.

PROGRAM EVALUATED

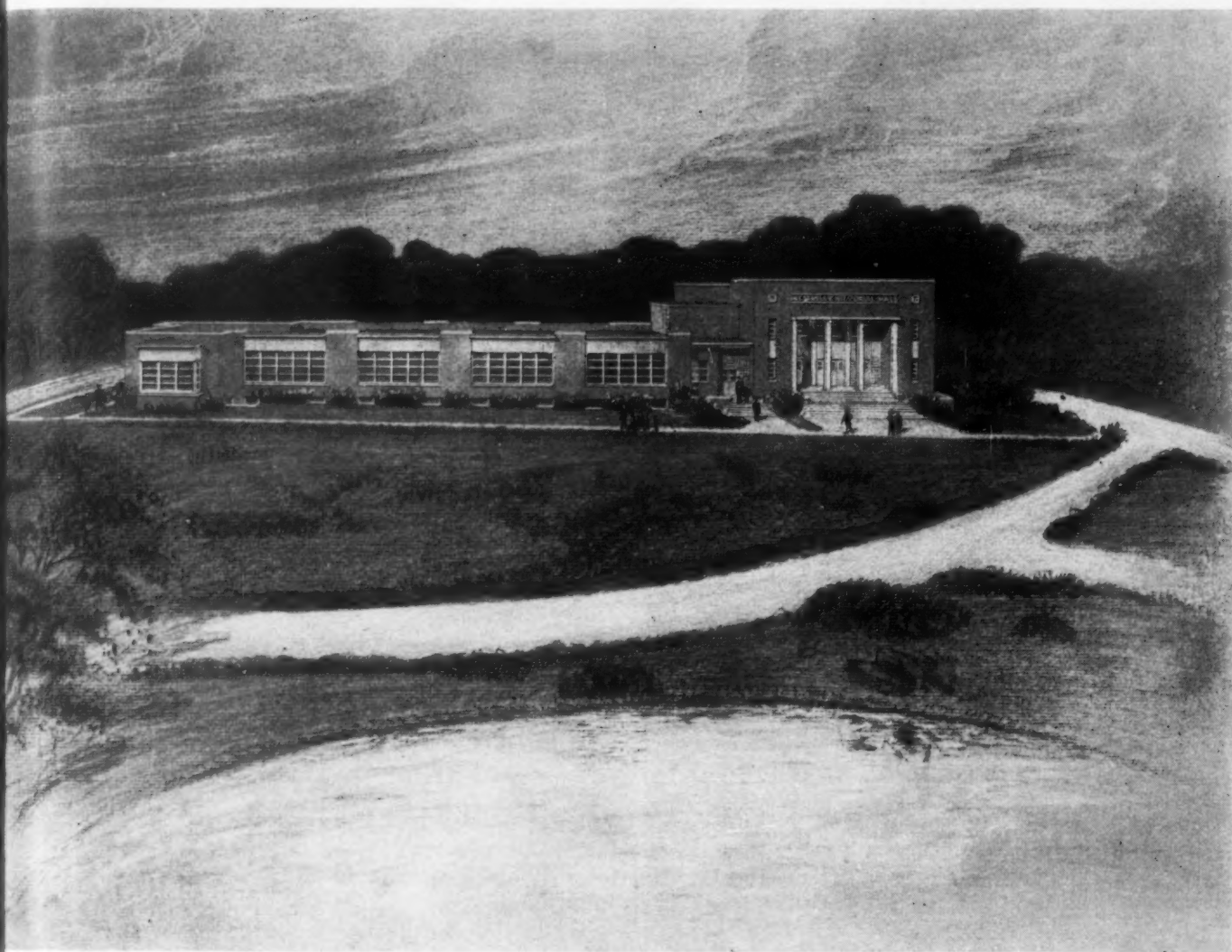
In evaluating the program, the following points stand out:

1. There has been a tremendous improvement in the matter of equalization of both educational opportunity and financial burden. The amount of money to finance the minimum program is guaranteed to all school districts. This amount will be supplied on a tax rate that applies uniformly to all parts of the state and the level of equalization has been substantially increased. However, experience alone will demonstrate whether or not this level has been made sufficiently high.

2. A distinct advance has been made in considering items of educational cost which need uniform consideration in such an equalization program. It is not certain whether the correct balance and weighting have been achieved. The cross currents of opinion and judgment playing upon the program as it went through legislative enactment may have caused some distortion. Experience and further study will have to supply the answer.

3. While the foregoing report may not indicate it completely, the details of operation place a premium generally on sound school district organization and efficient operation. The only questionable item in this respect is that there is no penalty of any kind placed on the overloading of teaching personnel.

4. The principal limitation on school financing in Utah for the next biennium is that the major portion of the school finance revenue must come from the ad valorem tax. With the exception of an estimated \$4,200,000 to come from other sources, the balance must come from a tax on property. This means that while a local board of education may have legal authority to exceed the minimum, it is faced with the practical limitation of the burden that property alone can carry. Inasmuch as the only source of revenue open to a local board to enrich the school program is the property tax, this feature of the program as it stands at present is a definite limiting factor on school financing.



Flexibility is the keynote of the architects' plans for the proposed new grade school to be erected at Westville, N. J. See article on page 40.

Schoolhouse Planning



Several exits to the storage building permit rapid removal of buses. Note outside floodlights above the steel sash. Buses are of the integral transit type rated for 73 high school pupils.

DESIGNING THE SCHOOL BUS GARAGE

THE TRANSPORTATION OF CHILDREN TO school has become one of the important problems of public school administration. With the trend toward larger administrative units in the reorganization of school districts, an increase in transportation facilities can be expected.

School transportation has already reached the proportions of "big business." This is evidenced by the fact that at present between 4,000,000 and 5,000,000 children travel from home to school each day on school buses numbering more than 90,000.

STATES HAVE REGULATIONS

The various states have set up regulations governing the operation of their transportation programs. Such regulations usually cover the selection of drivers, the making of reports, highway patrol inspections, pupil behavior, operation, maintenance, construction and equipment of school buses. Fundamental to the entire program is the important element of safety.

This element of safety threads through the complete transportation system. It starts with the proper design of the school bus and continues on through the selection, training and supervision of drivers and the maintenance of equipment in a safe and proper operating condition. If it is to carry out its responsibilities adequately, the school

THERON L. McCUEN

District Superintendent, Kern County Union High School District, Bakersfield, Calif.

transportation system should be provided with proper headquarters: a bus terminal or a school bus garage.

The purpose of the school bus garage is to provide for the service, repair, maintenance and storage of the bus fleet. Obviously, the size of the garage will be determined by the size of the fleet and by the amount of special repairs that the school wishes made by its own staff and facilities instead of turning the buses over to private shops.

Many schools handle only motor

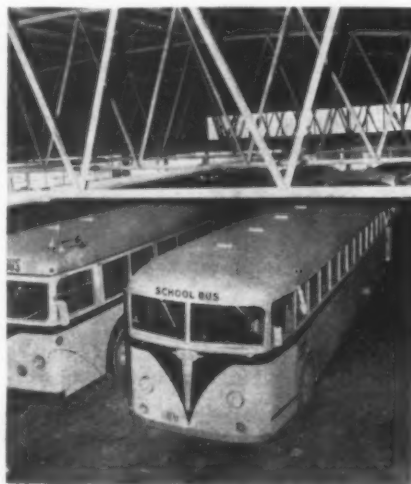
work and refer all painting, glass work, body and fender work and upholstery to private firms. As the fleet increases in size and as proper mechanics are available, it would seem desirable for the school to do as much of its own repair and maintenance work as is possible.

In general, the garage should provide for storage of buses, daily and periodic service, tire repairs, motor repairs and overhauling, painting, upholstery and glass work. It should also be equipped with lockers and showers for drivers and mechanics and provide office space and facilities for the storing of parts and supplies.

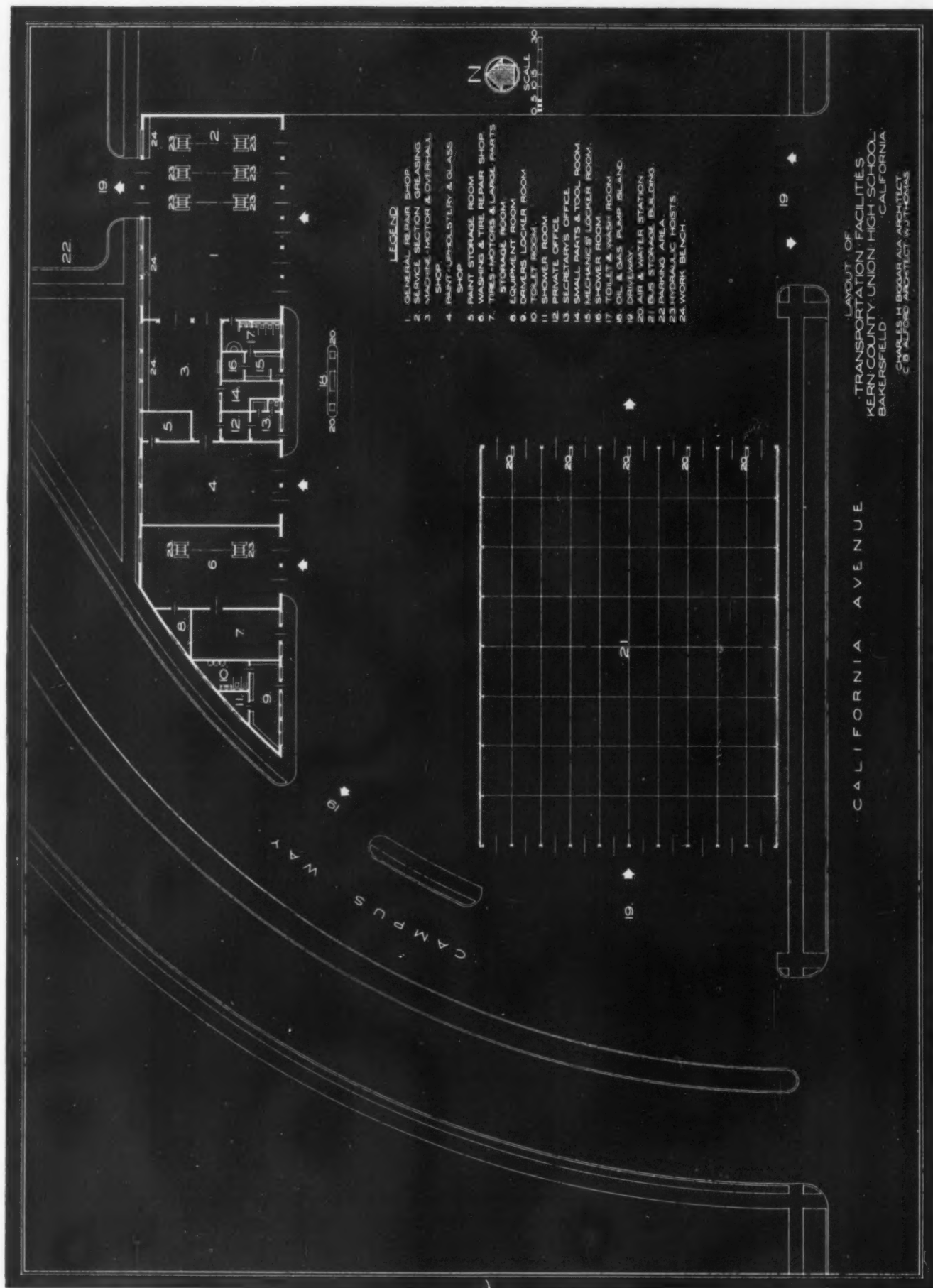
BUS STORAGE SPACE IMPORTANT

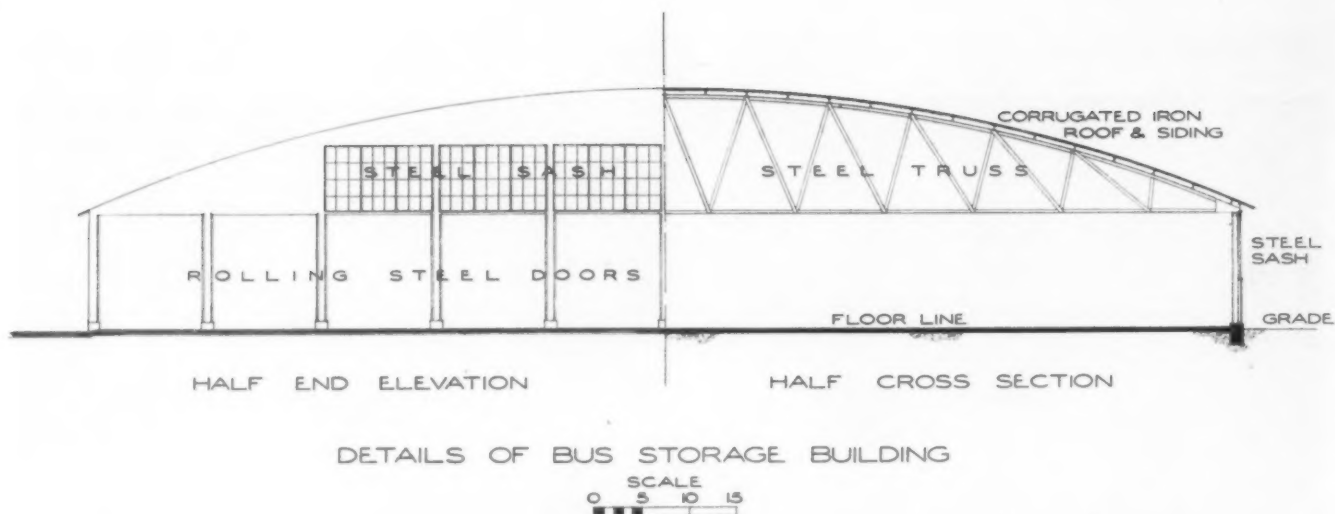
The storage element of the garage unit is particularly important and will vary with the size of the fleet. Certain situations may exist in which the length of a bus run does not warrant the return of a bus to the terminal for overnight storage. On the other hand, all the buses will be at their terminal during summer vacation and should be protected from the sun. During the school day cover should be provided to protect them from the weather. Every effort should be made to permit all buses to be under cover at the terminal, either in the storage area or in the repair unit.

The accompanying layout of trans-



There are no columns within the 120 by 160 storage area.





portation facilities is designed to provide for a fleet of from 40 to 50 buses varying in size from a 12 passenger panel bus to 73 passenger transit buses. It may be more detailed than some school districts would require but will serve as a guide to the more important elements to be included in a garage.

It will be noted that the storage unit is separated from the repair shops and is planned with 10 entrances and 10 exits. This unit of the garage must be designed to provide for fire safety and be arranged so that any bus may be moved without first having to shift one or two other buses. The building itself is of fire resistant construction and contains adequate fire extinguishers besides those carried in the buses.

An alternate to the rectangular type of storage building shown is the open type which permits each bus to be stored in a separate stall in a long narrow building or one of an L shape or U shape. This type of storage, while providing good protection against fire, requires additional space and necessitates considerable maneuvering of the buses in backing and turning, which is important in the operation of a large fleet, since the traffic at the terminal can become congested. It is important, then, to consider the flow of traffic at the terminal and to provide space accordingly.

The service and repair unit is designed to provide for a general repair shop with work benches, a grease section and hydraulic lifts. There is a driveway exit from this shop to enable a service tow car to proceed through the shop when it may be

necessary to tow a bus in. This is an item that is often overlooked.

Note that the work benches have natural light from large windows on the north side of the shop. Adjacent to the general repair shop is a machine and motor overhaul shop with a parts and tool room near by. Adjacent to these shops are mechanics' lockers, shower and toilet rooms. Similar provisions are made for the drivers. Experience has shown that it is desirable to separate the two units.

In the central portion of the building there is an office unit which provides space for the supervisor of transportation and for the department secretary. The importance of a secretary in a transportation unit is often overlooked. The person in this position should be assigned the responsibility of maintaining the proper service and operation records essential to the efficient operation of a school bus fleet. Adequate cost accounting and fleet service records pay dividends.

The oil and gasoline pump island with air and water stations is located in proximity to the offices and repair shop. It is convenient for the attendant servicing the buses and for the secretary in receipting for deliveries of gasoline for storage in the large 1500 gallon capacity underground tank.

Besides the service facilities at the island, there should be provision for a record stand or box where proper entries can be made for deliveries of gasoline and oil for the cost accounting system.

Also included in the layout is space for a paint, upholstery and glass

shop, a washing and tire repair shop and a tire and large parts storage unit.

The repair shops are of reinforced concrete construction with steel roof trusses and concrete floors. They are heated with unit space heaters.

The storage unit, however, is of special design because of its provision for a 120 by 160 foot area that is free from obstructing columns. The entire roof span is carried by specially designed trusses supported by columns in the sidewalls. The accompanying plan of the bus storage building shows a half end elevation and a half cross section of the building. The half elevation shows rolling steel doors with separating columns and steel sash above. Similar steel sash are carried along both sides of the building and provide adequate light during the day.

Artificial light for night use is furnished by light fixtures attached to the trusses; these are hung so that the reflectors do not project below the bottom chord of the trusses. Maximum clearance must be provided since some buses may have racks on the roof for carrying athletic equipment.

The half cross section shows the steel truss design and the roof. The latter is of 24 gauge corrugated galvanized iron. The laps are coated with heavy roofing mastic. The sidewalls are of 26 gauge corrugated galvanized iron.

The rolling doors are complete with locking devices, curtain, guides, operators and supports and are operated with chain hoists. There are four 18 inch screened vents in the roof to remove smoke or fumes that

may accumulate in the upper portion of the building. The floor is of concrete 5 inches thick and slopes from the center of the building to either end with a 6 inch fall. Approaches are constructed of asphalt concrete.

The building was designed by an architect and structural engineer and has proved to be extremely satisfactory as a bus storage terminal.

The elements making up a school bus garage or terminal must be re-

lated so as to function as a unit. Each element must be studied carefully to determine the part it plays and where it should be placed so as to contribute to the efficient operation of the terminal.

PLANNING COMMISSIONS HELP

CHARLES BURSCH

Chief, Division of Schoolhouse Planning
California Department of Education, Sacramento

THE RECENT TENDENCY TOWARD SEPARATION of schools from other governmental agencies is now being reversed and the pendulum is swinging toward a closer affiliation between the two. Some educational authorities have begun to suspect that in the battle of separation potential values to education were lost.

One of the local governmental functions which in recent years has enjoyed great expansion in the scope of its community services as well as in prestige is the planning commission. There is some evidence that school districts have failed to take maximum advantage of the potential contributions to education inherent in a well staffed regional or city planning commission.

HOW COMMISSIONS CAN ASSIST

Planning commissions can assist school districts in a number of ways, among them the following.

1. By giving consideration to school site needs prior to approval of plans for new residential subdivisions.

2. By giving assistance in selection and enlargement of school sites.

3. By facilitating the cooperation of school authorities with other public bodies in the development of long term, overall community plans. Such cooperation in the following matters should yield large returns: relocating or widening streets and highways, assignment or reassignment of streets as arterial or truck routes, provision of recreation facilities, water, sewers, gas, electricity, bus service, streets and fire fighting services, flood control, drainage, irrigation, land use studies and zon-

ing. It cannot properly be taken for granted that planning commissions will automatically render the foregoing services. Any continuing contribution of planning commissions to schools depends upon the existence of certain conditions and attitudes prevailing in connection with both planning commissions and school officials. Some of these are:

Planning Commissions

1. Must have status in the area served (city, county or region).

2. Must have competent technical staffs.

3. Must have a policy of giving service to regularly constituted administrative bodies rather than assuming administrative responsibilities.

4. Must operate under clearly defined procedures.

Governing Board of School Districts

1. Must provide continuing staff contacts with planning commission staffs.

2. Must desire assistance in the solution to problems rather than "political advantage."

3. Must time requests for service insofar as possible so that constructive planning can be done rather than belated and unsatisfactory compromise adjustments made.

4. Must recognize that planning commissions are also charged with meeting the needs of important community services other than education.

5. Must, in taking action upon planning commission recommenda-

tions, take into account the technical competence of the commission staffs.

The effectiveness of services by planning commissions to school districts undoubtedly will be enhanced as procedures for the handling of mutual problems are developed. An illustration of such procedures appears in the Education Code of California. For about eight years now planning commissions in California have had the task of participating with school boards in the selection of school sites.

THE CALIFORNIA CODE

The code states:

"To promote safety to pupils and comprehensive community planning the governing board of each school district before acquiring title to property for a new school site shall advise in writing the planning commission having jurisdiction of the proposed acquisition. The planning commission shall investigate the proposed site and within thirty days shall submit to the governing board a written report of the investigation together with recommendations concerning the site.

"The governing board shall not acquire title to the property until the report of the planning commission has been received. If the report does not favor the acquisition of the property for a school site, the governing board of the school district shall not acquire title to the property until thirty days after the commission's report is received."

The variety of ways in which different communities comply with this code section is great. Some commissions issue a simple form letter based



upon little or no study of the problem. Others make complete area maps for use in informing the school board. Still others make dogmatic recommendations on practically all phases of school site selection, including some that are clearly matters of educational policy.

Generally speaking, in areas in which active planning commissions are found, school officials have appreciated the constructive assistance obtained from them under this act.

Another related problem of major importance is that of obtaining adequate, well located sites in areas being newly taken over for subdivision into residence lots. Throughout wartime activity in the establishment of subdivisions and in many current situations in which tracts are being subdivided for veterans' housing, the problem of providing school facilities and service has been overlooked by governmental authorities, by planning groups and by subdividers.

SITES NOT ALWAYS AVAILABLE

This neglect has resulted in the occupation of subdivisions long before school facilities are available. Furthermore, and perhaps more important, is the fact that in many instances adequate, well located school sites are no longer available because they are already occupied by dwellings.

An essential element in remedying this situation is that arrangements be made for the governing board of the school district to meet with the subdividers and the planning commission, or other civil body having jurisdiction over subdivisions, for discussion of school services for the occupants of a proposed subdivision *before the subdivision is approved.*

The Regional Planning Commission of the County of Los Angeles, in cooperation with the office of the Los Angeles county superintendent of schools and the division of school-house planning of the California State Department of Education, has adopted a procedure which seems to meet the need just described. Briefly stated, the procedure has three steps:

1. The planning commission (the governmental body to which subdivision plans are first presented) assumes definite responsibility for informing the governing board of the school district concerned regarding what is proposed.

2. The governing board determines promptly whether or not the proposed subdivision makes necessary the acquisition of land for school sites and, if so, where and how much.

3. The planning commission then participates actively with the school

district officials in arranging for the acquisition of the property needed for school sites.

Three form letters and some illustrations used in carrying out the Los Angeles County procedure just described are here reproduced.

County of Los Angeles The Regional Planning Commission

TO: ALL DIVISIONS AND SECTION HEADS
FROM: A. H. ADAMS, ACTING CHIEF ENGINEER
Re: Procedure for the notification of school districts
Tentative tract maps

1. An additional copy of the tentative tract map and owner's statement shall be obtained by the subdivision section and sent to the Advance Planning Division upon receipt by the subdivision section.

(WORK TO BE DONE BY THE COMMUNITY DESIGN SECTION)

2. Check for school district's name, superintendent's address, and so on.
3. Instruct secretary on filling out mimeographed transmittal form and mail to school superintendent; enclose duplicate reply forms.

4. Keep a chronological file. Check in fifteen days for reply from the school district. If no reply has been received at this time, contact school district and determine why.

5. Supply the subdivision section immediately with one copy of reply and any planned development; proceed accordingly:

Subdivision section
Community design section
School district representative and subdivider
Negotiate for site, if any

6. When the matter is closed, file appropriately in the central file and subdivision section tract files.

Site acquisition file
Correspondence file

County of Los Angeles The Regional Planning Commission

Board of Education,
District and Address.

Attention: Superintendent of School District
Subject: Tentative subdivision tract No. _____

Gentlemen:

The Regional Planning Commission now has under consideration tentative subdivision tract No. _____. This tentative tract is within your school district, located _____. A copy of the tentative tract map is enclosed.

Under Section 6 of the Subdivision Map Act, Statutes of 1937, Chapter 670, the Regional Planning Commission has thirty days in which to make any necessary revisions to the subdivider's proposals.

We are notifying you at this time so that if a new school site or an addition to an existing site is necessary in this general area, appropriate action shall be taken by you. If the acquisition is within this tentative subdivision tract, immediate action must be taken by you; the Regional Planning Commission cannot negotiate for you in any case.

The subdivider proposes _____ single family residences and _____ multiple dwellings and the final tentative tract recommendations will be made on or before _____.

Kindly acknowledge receipt of this transmittal and submit the enclosed reply form in duplicate to the address given. If you have any recommendations to make please attach them to the reply form.

Yours very truly,

To: The Regional Planning Commission,
Los Angeles 12, Calif.

Attention: Community Design Section

From
School District
Subject: TENTATIVE SUBDIVISION TRACT NO. _____

Gentlemen:

We have examined tentative subdivision tract No. _____.
We (would) (would not) be interested in a site within this subdivision.
This development (is) (is not) going to necessitate a new school site in this area or an addition to our _____ school.

Very truly yours,

Superintendent
School District

THIS GRADE SCHOOL CAN GROW

**JOSEPH NORMAN HETTEL and
WM. KENDALL ALBERT**

Architects, Camden, N. J.

THE PROPOSED NEW GRADE SCHOOL to be erected by the board of education of the Borough of Westville in Gloucester County, New Jersey, is an excellent example of the postwar building to which we have been looking forward. The setting is unusual in that the school is to be located in a municipal park overlooking a main highway.

By making the partitions between rooms non-weight bearing so that they can be removed without affecting the structural framework of the building and by providing for the addition of future classrooms, the architects have introduced flexibility

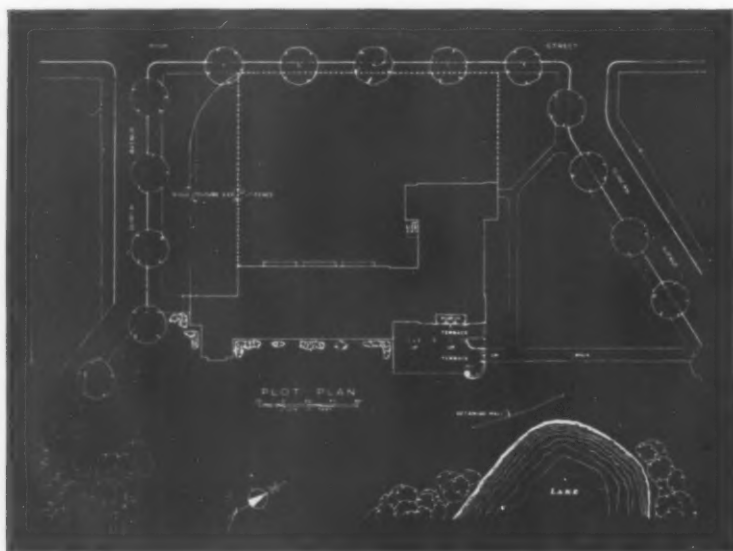
the one in the new school as a community center, dedicating it as a memorial to the boys who served in World War II. It has been planned to serve both the community and the school, separate entrances for the school and auditorium making possible its use for community activities without interfering with the functioning of the school.

The stage will have ample off-stage space for scenery, also a large storeroom for props and two dressing rooms. The auditorium walls will be lined with dull finish large clay tile units which provide an indestructible surface. The ceiling is to be treated with acoustical plaster.

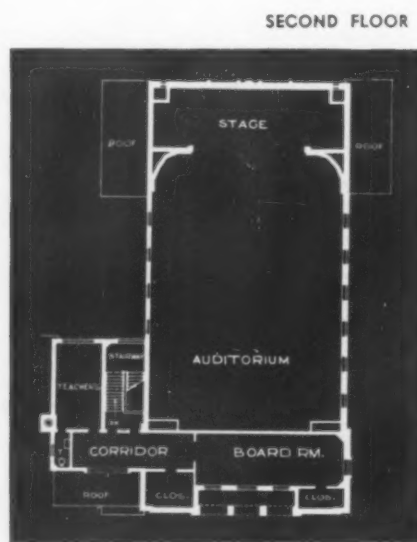
Domestic arts and manual training are not now included in the curriculum but it is expected that they

will be added in the future; therefore, space has been provided for these rooms in the basement, which extends under the back part of the building. There is no basement under the front portion of the building but the architects, by taking advantage of the contour of the lot, have been able with the aid of only a little grading, to provide classrooms with full sized windows for the future manual training and domestic arts courses in the rear of the basement. The contour of the land also makes possible a well lighted space under the auditorium which can be used for a kitchen and a lunchroom.

Ample playground space in an enclosed area is provided for the smaller pupils' use in the rear of the new school building.



PLOT PLAN

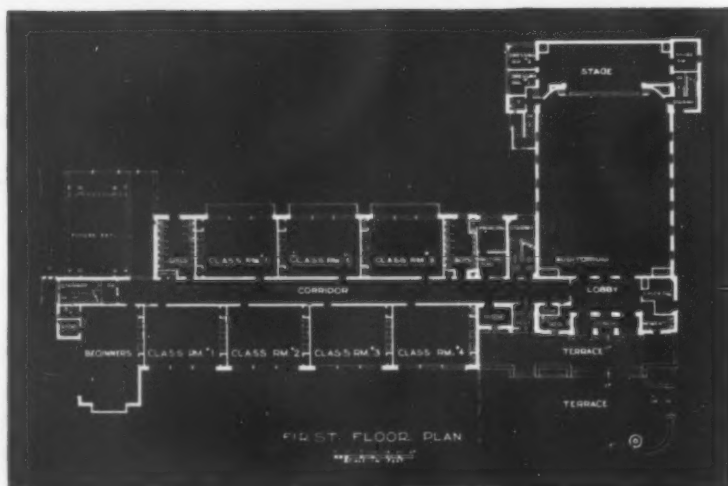


SECOND FLOOR

into the plan. The original building will have eight classrooms and ground space for eight more.

The beginners' room is oriented so that it will have full benefit of the sunlight. It is placed near the side entrance, where the pupils will have easy access to it without having to mingle with the older children. A large storeroom for supplies and project materials has been provided as well as a private toilet room with fixtures for juveniles.

Since there is no other auditorium in the borough, it is intended to use



FIRST FLOOR



WHAT'S HOLDING UP CONSTRUCTION?

THOMAS J. HIGGINS

Consultant on School Buildings and Surveys
Chicago

WHAT ARE THE CHANCES OF BUILDING schoolhouses in 1948 at 50 per cent above prewar figures? I don't know the answer but I am optimistic and will hazard a guess.

The blame for the prohibitive cost of schoolhouse construction cannot be laid on any individual doorstep. The high costs are a cumulation of many factors and can be traced back to many doorsteps that must be cleaned up before new construction to any degree can be hoped for.

Home building in the Chicago metropolitan area has bogged down. One contractor has just completed 34 houses at an average profit of less than \$200 each. Home building is a hazardous venture in the present market. The \$6000 G.I. homes are not selling too fast at \$11,500. When the cost of a house becomes greater than the purchasing power of the building mechanics, home building has reached an impasse. That's where we are now. Contractors are looking for work.

TOO MANY CONTINGENCIES

They are looking hopefully at the prospective school building market but have not yet attempted to figure the jobs for what they are worth. Nine out of 10 school projects that have been figured this year have not been awarded because of costs which exceed the bonding limits. Although the easy "take" of the fee basis or cost plus on industrial building has

passed, too many contingencies, real or false, are being added by the contractors to the true estimated cost of building and a fair profit. If the contingencies do not materialize, and many do not, the contractor's profit is far in excess of that to which he is justly entitled.

There are a lot of fishing expeditions being made by contractors who have figured school jobs today. It takes time and money to estimate a job. Rather than spend the time and money, they take a flier, submit a preposterous figure and sometimes they land something.

DIFFERENTIALS TOO GREAT

On a recent electric light job figured from complete plans and specifications, the proposals varied from \$50,000 to \$30,000. The final contract figure, after some revisions and substitutions were effected, was \$12,000. Figures on grading and tiling of an athletic field, also from complete plans and specifications, ranged from \$34,000 to \$68,000, and the job was finally awarded for \$42,000. On another recent school project bids for the heating, ventilating, temperature control, plumbing and sewage totaled \$46,000 and the lowest electrical work bid, for conventional incandescent lighting, was \$48,500.

Strange as it may seem, the big increase in construction costs came after the war ended. Costs on two

identical schools from the same plans and specifications, one constructed in 1939 and the other figured in 1947, show the following increases for various branches of the work: masonry 84 per cent; carpentry 80 per cent; lathing and plastering 139 per cent; painting 17 per cent; heating 27 per cent; plumbing 117 per cent, and electrical work 277 per cent.

On another job bid in 1946, the unit cost over 1939 base figures increased less than 50 per cent on the following branches of the work: masonry, structural steel, fireproofing, carpentry, roofing, painting, glazing, sheet metal, terrazzo and tile work and more than 50 per cent on lathing and plastering, marble work, heating, ventilating, plumbing, temperature regulation and electrical work, the last named again far exceeding the costs of any other trade with an increase of 320 per cent. The median increase in costs of all trades was 64 per cent over the 1939 base.

WORKERS' PRODUCTIVITY A FACTOR

Serious charges have been made against labor for its high hourly pay scale and its low productivity. Contractors have stated that the laying of 800 bricks a day is all they can hope for today, compared to the 1500 to 2000 in prewar days. This would indicate that the hourly pay scale is of little consequence in the

total cost of a building but that the productivity of the workmen is the factor to consider.

However, it is generally believed that with greater availability of materials on the job more work can be expected from the mechanics. On the other hand, it must not be forgotten that the average age of building mechanics is well over 50 years and that they are not quite as spry as they should be.

It is also charged that the number of apprentices in most trades is not in proportion to the number of journeymen. The expected increase in the number of building mechanics to be obtained from the ranks of returned servicemen has not materialized. The general adoption of the 40 hour week seems assured. Elimination of overtime work and work bonuses will reduce building costs.

DEMANDS MUST BE MODIFIED

Jurisdictional squabbles will have to end or the tradesmen will legislate themselves out of jobs. The recent congressional restraint on labor unions was the result of too many unjust practices. The outlook for building mechanics for the next decade is more favorable than ever before, if they will give a day's work for a day's pay. The demands of certain trades are eliminating their materials from building construction.

The percentage of the school building costs today being devoted to carpentry is probably less than it was 10 years ago and will no doubt be further reduced. Wood floors and baseboards are gone from the classroom. Door frames and trim and blackboard trim are now of metal. Wood sash was being replaced by metal long before the war ended. Aluminum is another postwar threat to wood sash and frames for windows.

Archaic building codes and ordinances have added unnecessary costs to schoolhouse construction. A revision of codes and work agreements with labor unions, which must make some concession to new materials and new methods, is one of the first and most critical steps to be taken toward reducing building costs. There is a movement in this direction today in some metropolitan areas.

The manufacturers and the material dealers, in their reluctance to

quote firm figures to contractors, have retarded intelligent and honest bidding. They have not been reluctant to squeeze the last ultimate penny from each sale. A lot of ill will has been engendered by such practices with architects and contractors that will not be soon forgotten when the buyers' market returns.

Lumber, for instance, in most communities, reached three times its prewar price. Common brick has doubled in cost. Both of these materials, however, have slid off somewhat from their peak prices. Pipe was unprocurable at any cost. We cannot hope to construct schoolhouses without stable figures from the manufacturers and dealers and they must be figures commensurate with the value of the materials.

Architects have in many instances made heroic efforts to reduce costs by devising methods of construction that will utilize the less critical materials. Again we must mention the archaic codes and ordinances that have blocked many ambitious plans for reducing costs.

We are confronted, however, with many school plans that do not conform to good schoolhouse planning or reflect any effort on the part of the architect to eliminate costly and questionable detail. The first step any board of education should take toward erecting economical schoolhouses should be to provide for intelligent educational designing to develop curricular and administrative "fit." The next step is to select an architect experienced in this field and with a desire to cooperate in providing the maximum amount of facilities for the available appropriation. Unless there is a fair chance of providing the required facilities from available funds, the board of education should be so informed.

SHOULD SURVEY FACILITIES

The school board, too, should look to a survey of present facilities to determine to what degree the present plant is being efficiently utilized before contracting for plans for additional space. A definite division should be made between those items that are essential to carry on the functions of the school and those that are desirable and can be held for more favorable construction costs.

School plants throughout the country, even when considered crowded, are rarely used to capacity. Present

construction costs are going to make it mandatory on the part of the school administrator to devise means of accommodating additional pupils in present quarters. It is not unlikely that in the next decade we may find secondary schools running on a twelve month basis. The present high birth rate may panic some communities into a building program that will exceed actual needs.

This article was begun on an optimistic note. In spite of the foregoing picture of conditions as they exist, I am still optimistic and believe we shall see some definite improvement in the costs of schoolhouse building before 1948. Contractors are soon going to give up the dream of the fixed fee and cost plus days and get down to figuring on a competitive basis again or they are not going to have any work.

MORE MATERIALS WILL HELP

Labor, I believe, is going to produce more in a day's time with greater availability of materials and the outlook for more materials on the job seems good. What will be done to reduce the average age of workers is problematical. Many mechanics are now unemployed.

Some communities today are revising building codes and the contractors and unions are closer to working out agreements than they have been for a great while.

The manufacturers and dealers have begun to reduce prices. The next step is the making of firm bids to contractors or we are going soon to have a surplus of material. The school construction field is too big to be ignored for long by the manufacturers. The architects must make a greater effort to use economical construction methods and available material. The simplified design of the new schoolhouses will eventually be reflected in lower construction costs.

Educators must reduce their building requirements to the minimum until prices level off and the desirable facilities can be added. Long range building programs should be encouraged.

If more consideration is given to the common welfare by the people concerned with educating children and by those whose business is planning and constructing schoolhouses, the deadlock may be broken sooner than we had hoped for.

ON GUARD AGAINST BIAS IN TEXTBOOKS

WHAT IS PRESENTED IN TEXTBOOKS determines the aims, the emphasis and the scope of instruction in most classrooms of our American schools for reasons well known to educators. Bias in textbooks in the social studies is, therefore, a real threat to a sympathetic understanding of other countries as well as to friendly relations between regions and population groups of our own country.

Most of our textbooks in the social studies are relatively free from deliberate bias in the treatment of issues, in my opinion. It is possible, nevertheless, for a prejudiced attitude to creep into such textbooks through the author's failure to give adequate treatment to a fact or a movement as well as through his failure to present a fair treatment of both sides of a controversial issue.

However, even if textbooks were completely free from bias, it would be still possible for prejudices to find expression in the classroom. Teachers and pupils are greatly influenced by the prejudices expressed in their homes, in the newspapers and over the radio, as well as from pulpits and in public forums. There are also sectional prejudices that influence instruction. Even though textbooks are free from bias, the climate of opinion in many communities makes it impossible to avoid prejudiced teaching. The teaching in our schools is greatly influenced by the barrage of propaganda that assails pupils and teachers generally.

CONCERN ABOUT BIAS NOT NEW

The concern about bias in textbooks in the social studies is not new. Immediately after World War I advocates of international peace urged a revision of textbooks so as to eliminate inaccuracies and prejudicial interpretations. Learned societies, professional organizations and teachers issued pronouncements on the need for textbook revision. One of the best known studies of textbooks was reported by Dr. Bessie L. Pierce in her book entitled "Civic Attitudes in American School Textbooks." The study revealed evidence of some unwarranted bias

J. B. EDMONSON

Dean, College of Education
University of Michigan

in textbooks.¹ Similar studies have been made by other American scholars. Many of these have had little influence on instruction, however, because of adverse propaganda.

In 1944 a committee of the American Council on Education issued a report entitled "Latin America in School and College Teaching Materials."² This report was based on an examination of varied types of teaching materials, including textbooks, charts, current events, magazines. The study revealed no evidence of conscious and perverted antagonism toward Latin America.

ONE ENCOURAGING NOTE

However, it pointed out that many of our books and pictures embody in their presentation of Latin-American matters certain racial prejudices and prejudgments that are basically inimical to our adequate understanding of Latin America. It is encouraging to note that the report concludes that the teaching materials on inter-American subjects in common use today are much better than the teaching materials on similar subjects a quarter of a century ago.

A second investigation of history textbooks is now being sponsored by the Canada-United States Committee on Education. A preliminary draft of the report reveals that the schools of the United States devote too little attention to Canadian history and geography and that the Canadian schools place too much emphasis on disagreements with the United States over boundaries, tariffs and border incidents.

The report highlights the fact that the schools of both nations have failed to stress adequately the common ideals and aspirations, the mutual problems and common achievements of the two countries and the other evidences of genuine friendship. The preliminary recommen-

¹ University of Chicago Press, 1930.

² American Council on Education, Washington, 1944.

dations include the proposal that Canadian history textbook writers should seek to achieve better balance in their treatment of topics dealing with Canadian-American relations, placing increased emphasis on the growth of cooperation and good will and less on war and conflict.

There is also the suggestion that a more determined effort be made to present a clearer picture of recent economic, social and cultural inter-relationships between Canada and the United States. Authors of American history textbooks are advised to provide a more balanced treatment of all periods in Canadian history and to place greater emphasis on the common movements of the two countries, such as safeguarding domestic and world peace.

Similar reports are needed on the textbooks of other countries. We need an authentic report on what is taught and what should be taught in the American schools about Russia. We need to know also what is taught in Russian schools about the United States and whether reliable information is given children.

According to reports, our country is grossly misrepresented to the Russian children. There is, however, much evidence that American children are learning little about Russia except the views of extremists as expressed by the propaganda of the anti-Russian and pro-Russian groups.

PURSUE FACTS AND USE THEM

While our American textbooks in the social studies are relatively free from deliberate bias, there is grave danger that prejudicial teaching may result from the riot of propaganda to which teachers and pupils are continuously subjected. In our classrooms we should, therefore, be actively concerned with cultivating a genuine zeal for finding and using facts in the field of the social studies.

One of the best arguments for cultivating such zeal is expressed in the constitution of U.N.E.S.C.O. which declares that: "Since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed."

Chalk Dust

SEPTEMBER



I OPEN A NEW BOOK TODAY. It is a book wherein the names of young people are to be written—Allen, Buckheimer, Ciccoletta, Galapoulos, Kwratkowski, LaPorte, Murphy. I am responsible for the writing so let me write each name

equal to the other, realizing that "all races are here, all of the lands of the earth make contribution here."*

I turn a new page today. It is a page where the records of youth are to be noted down: superior, excellent, good, failure. I am responsible for the records, so let me write with understanding, that the records may be honest and fair and that they may spell growth and achievement.

I write a new chapter today. It is a chapter written for the glory and well being of my country. It may be a very small chapter but I am responsible for the writing, so let me write with humble heart and high purpose that the writing may reflect an abiding faith in the future of America.

« »

SHOOTING THE BREEZE

ONE OF THE MOST SERIOUS occupational hazards besetting the superintendent of schools is the duty of public oratory at all civic, patriotic, state and local gatherings. Once the word gets around that the school administrator is articulate, free gratis, he knows no surcease. When "Prune Your Vineyards Week" is celebrated, the superintendent must perforce prune his vines vociferously and publicly. When "Buy a Bale of Hemp Day" is foisted on the community by the local merchantry, the superintendent not only must orate in behalf of hemp but is almost expected to hang himself to prove the value of stout rope.

Worse yet, most of the speeches must be out of doors, in the nearby cemetery or at the athletic field alongside of the railroad track, for the more refined indoor engagements are reserved for the Sunday school leader whose voice is more suitable to confined



space or who is subject to attacks of acute hay fever.

Usually, as a bonus for the speaking, the school head is given the honor of organizing the parade, providing the school band, getting buses for the feeble veterans and keeping the kids in some semblance of order, including the infant population which has seeped in from nearby and less patriotic communities.

As soon as the superintendent gets off to a stumbling start in his oration, some kid from Lackawanna falls off a monument where he (the kid) has been gamboling, the band starts an argument with a union organizer and the veterans' bus breaks down.

Woe, if in his hortatory mouthings, the superintendent fails to advertise the advantages of the community or the nobility of all local political leaders, and twice woe if he blunders into any controversial issues. By courtesy and custom, his remarks must be confined to the beauties of the local scenery with some strong and daring comments upon the weather.

Public relations, they say, includes the art of speechifying but it is the wise school superintendent who has laryngitis from Memorial Day through Arbor Day. Let him remember that public speakers are a dime a dozen but good superintendents are as scarce as hens' teeth. If he absolutely must test his lung capacity, he should consider the career of an auctioneer, which pays better than a superintendency anyway.

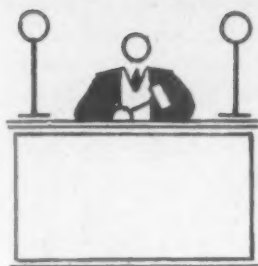
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DEFINITION TO END DEFINITIONS

EDUCATION IS THAT PROCESS BY WHICH ACCRETIONS TO the efferent speech patterns and the contemual and potential mentality of preadolescence are developed by attention to the howness and whichness and whyness of objective experiences as they are correlated to concomitants in establishing with satisfyingness the fixitivity of the norm and the preponent responses of the neurons, assuming maximum feasible self direction with accrescent maturization; and when that is attended to, let us hope they will not fall on the buttered side.—Quoted from "Pedagogy—The Humpty Dumpty Science" by Burges Johnson (*University of Colorado Studies*, Vol. 2, No. 4).

Frederick J. Maffei

*Leaves of Grass by Walt Whitman.



CURRENT DECISIONS ON SCHOOL LAW

M. M. CHAMBERS

American Council on Education

FISCAL INDEPENDENCE

Ruling: *Town and city boards of education in Connecticut are agencies of the state having broad powers to control education and, in the disbursement of funds made available for school purposes, they are not subject to interference by the town or city or any of its officers, except as limitations are found in the state statutes.* State ex rel. Board of Education of City of Bridgeport v. D'Aulisa, City Comptroller, (Conn.), 52 A. 2d 636 (1947).

Case: The city comptroller refused to certify pay rolls approved for payment by the board of education for the first half month of the fiscal year beginning April 1, 1946. He contended that payments at the rate thus indicated would result in the disbursement of \$232,369 in excess of the annual appropriation.

The comptroller took no notice of the fact that \$187,922 reposed in a special fund established as a reserve for employees' bonuses; nor did he take account of the possibility of transfers of funds for other school purposes to the salary fund.

The superior court decided that the comptroller was acting within his lawful discretion and refused to command him to certify the disputed pay rolls. This judgment was resoundingly reversed by the unanimous supreme court of errors.

The state statutes provide that the money appropriated by any city for schools "shall be expended by and in the discretion of the board of education" and specifically authorize the board of education to transfer unexpended balances from one item of expenditure to others, as well as to expend money received from other sources for school purposes.

The city comptroller has no discretionary authority but merely the ministerial duty of ascertaining that any particular disbursement by the

board of education does not exceed the total appropriated by the city for schools for the current fiscal year, plus any money received for school purposes from other sources. Therefore, in this case "the city's comptroller had no right or power to do other than certify that sufficient funds, appropriated for that fiscal year, were available for payment of these bills."

Comment: This is a perennially recurrent story, familiar in many states and cities. Give an auditor an inch, and he takes a mile. Through an excess of zeal or for less worthy reasons, nonschool fiscal officers often miss the distinction between their ministerial duties and the discretionary power committed by law to the board of education. Again and again the courts have rebuked them for unlawful usurpation of power. The auditing function is never intended to be twisted into a power to dictate the management of the public schools.

SALES TAX FOR PUBLIC SCHOOLS

Ruling: *The amendment to the constitution of Michigan which became effective Dec. 5, 1946, allocating one cent on each dollar of sales of tangible property as collected by the state under the general sales tax act to local governmental units, one half to school districts and one half to counties for remission to cities, townships and villages on a per capita basis, was validly adopted by popular initiative and is self executing.*

However, that portion of the same amendment which directs the legislature to "make annual grants to school districts out of general funds, over and above all constitutional allocations heretofore and herein provided, in at least amounts which bear the same ratio to total sales tax revenues of the preceding year which the legislative grants in the year

1945-46 bear to said revenues of the preceding year" is not self executing and requires implementation by legislative act. City of Jackson v. Nims, Commissioner of Revenue, et al., (Mich.), 26 N. W. 2d 569 (1947).

Case: The issue was the legality of the manner in which the amendment was proposed, submitted to the people and adopted (by popular initiative). The procedure was found to have been in accord with the constitution, and the amendment valid. The argument that the subject should have been one for the legislature and not for popular initiative has no legal standing.

Comment: State school support in part by constitutionally allocated taxes is not new in principle, but the quoted clause of the new amendment is an interesting effort to prevent the existence of the allocated tax from being used as a bludgeon to beat down the size of the successive future legislative appropriations for the same general purpose.

The allocation provides a backlog of state support and undertakes also to guarantee that the presence of this backlog will not result in disproportionate cutting of the periodic appropriations, while leaving the legislature free to increase them as future conditions may require. The "floor" of the appropriations is tied to the sales tax receipts at a fixed ratio. The arrangement is not perfect in long range theory, but its adoption demonstrates a permanent public policy of generous state support for public education.

RELEASED TIME FOR RELIGION

Ruling: *The California statute of 1943 which permits pupils in public schools to be "excused from schools to participate in religious exercises or to receive moral or religious instruction," as currently applied by the Los Angeles board of education, is in harmony with the state con-*

stitution and does not conflict with the constitutional provisions that there shall be free exercise and enjoyment of religious profession and worship, without discrimination or preference; that no public money shall go to the support of any sectarian or denominational school; that there shall be no sectarian instruction in the common schools, and that public money shall not be used in aid of any religious sect, church, creed or sectarian purpose. *Gordon v. Board of Education of the City of Los Angeles* (Peppin et al., Intervenor), (Cal. App.), 178 P. 2d 488 (1947).

Case: In Los Angeles an interfaith committee, a voluntary organization of citizens, provides instruction for pupils at their respective places of worship on a schedule agreed to by the board of education. The board excuses such pupils only on signed request of their parents and the only incidental public expense involved is for the circulation of the request cards and the keeping of records of released time.

Comment: The ruling is by an intermediate court and there is possibility of appeal to the supreme court of California. Meantime, the similar case recently similarly decided by the Illinois supreme court, involving the schools at Urbana, is pending on appeal to the Supreme Court of the United States. Compare also the recent Chicago case, digested on page 50 of *The Nation's Schools* for May 1947.

PITTSBURGH DECISION REVERSED

Ruling: *Certain teachers, designated as junior high school teachers but actually teaching in the upper grades of six year high schools, are properly paid according to the Pittsburgh salary schedule for junior high school teachers and are not entitled to the additional increments which appertain only to the schedule for senior high school teachers.* Appeal of School District of Pittsburgh, (Pa.), 52 A. 2d 17 (1947).

Case: This decision reverses the intermediate court judgment in the same case, the facts of which were more fully stated on page 52 of *The Nation's Schools* for March 1947. Judgment in favor of the claims of the teachers would have necessitated payment of about \$86,000 additional in annual salaries.

Dissent: Chief Justice Maxey of

the Pennsylvania supreme court dissented sharply from his colleagues. He quoted the statutory definition: "Any high school giving work for the seventh, eighth, ninth, tenth, eleventh and twelfth years of not less than 180 days in each year, and conforming to the regulations established by the department of public instruction, and having at least five properly qualified teachers, shall be designated a six year high school." As to the plaintiff in this case (a junior high school teacher teaching in the upper grades of such a six year high school), said the Chief Justice: "That which the law of this Commonwealth gave him, the school district had no authority to take away."

CONSTITUTIONAL DEBT LIMITS

Ruling: *An Indiana act of 1945 designed solely to create an additional taxing unit coterminous with the city of Hammond, to be governed by the trustees of the school city of Hammond, for the purpose of borrowing beyond the school city's constitutionally fixed debt limit of 2 per cent of the value of assessed property, to erect a technical-vocational high school, is unconstitutional and void.* *Cerajewski v. McVey*, et al., (Ind.), 72 N. E. 2d 650 (1947).

Case: The act employed the hackneyed subterfuge of creating a class of cities (65,000 to 86,000 inhabitants) which would actually include only Hammond and created the new taxing unit as a transparently concealed device to acquire new borrowing latitude of an additional 2 per cent.

The court, however, regarded this as a surreptitious violation of the constitution and pointed out that the practice, if permitted, could be carried to absurd lengths by creating a new taxing district for each course of instruction.

Comment: Multiplication of separate but coterminous school taxing districts cannot be recommended for the long range welfare of public education. But the 2 per cent debt limit is unduly tight. A contemporaneous New Hampshire case shows that the statutory limit in that state is 5 per cent, and the supreme court advised the legislature that an act giving school districts temporary emergency power to exceed that limit with the approval of the governor and council

would not be unconstitutional.

A clause of the proposed bill, however, authorizing the state board of education to recommend postponement of building projects but not making clear whether this recommendation would have any mandatory force, thus injecting an element of uncertainty as to the validity of bonds which might be issued, was regarded as undesirable by the court in its advisory opinion.

DISCRETION ON SCHOOL SITE

Ruling: *A county board of education in Kentucky which purchased a site for a new consolidated school located at the largest town in the area to be served, but only 1½ miles from the county line and 20 miles from the homes of some other pupils in the area, is held to have abused its discretion. The board did not seek the advisory opinion of the state superintendent of public instruction, as provided in current regulations of the state board of education, and its plans may be halted by a taxpayer's injunction.* *Phelps et al. v. Witt et al.*, (Ky.), 201 S. W. 2d 4 (1947).

Case: Citizens of the town in question had subscribed \$2735 for landscaping the \$3000 site for the proposed \$140,000 building. Injunction against the plan was denied by the trial court but this decree was reversed by the supreme court in a picturesque opinion by Justice Siler: "It is very difficult to visualize a *summum bonum*," said he, "in the form of a schoolhouse located out on the very hem of the people's territorial vesture."

Mindful that courts should interfere in such cases only rarely and where abuse of discretion is clear, he continued: "Only where a decision quivers on the quicksand of caprice or wavers upon the waters of mere whim can there be found that enemy to public welfare named 'abused discretion.'" Apropos of what appeared to be an abdication of sound discretion by the defendant board of education, the Justice quoted a quaint quatrain:

*You know, my friends, with what
a brave carouse*

*I made a second marriage in my
house;*

*Divorced old barren Reason from
my bed,*

*And took the daughter of the vine
to spouse.*

KEY TO THE GERMAN QUESTION

EMIL LUDWIG

EVERY NATION, POLITICAL PARTY AND social class is agreed that it will be a decision of the highest political importance as to whether Germany is to be split up or administered as a whole, where her eastern frontier is to be set and what reparations she will have to pay. Yet my knowledge of the German character tells me that the solution of the problem is not to be sought either in the frontier, the country or in money.

It lies in the education of German youth. For me "deNazification" and "democratizing" are empty words. I can see only shamelessness in the way the leaders of all German parties proclaim their innocence and assert their rights and in the way the Allies have allowed this movement to develop in the last two years.

For thirteen years, starting in 1920, a dozen or so of us collaborated on two small periodicals which attempted to combat the rise of that same arrogance after World War I. We were powerless because the same professors and teachers who had taught under the kaiser were teaching young Germans from their sixth to their 24th year.

SOME AMERICANS PRAISED THEM

Later, I observed the work of 600 German professors in the United States who had been sent out in the 20's to prove Germany's innocence and to raise money. Puritans and sportsmen, *i.e.* nearly all Americans, praised the first mission as a manifestation of the "spirit of reconciliation." And the bankers were full of praises of another sort. One of the wealthiest of them said to me much later: "After all, there were some big commissions on the million dollar loans."

When the American authorities recently dismissed 30 professors in Munich, I wrote that out of 6000 German professors 3000 ought to be dismissed—not punished, not driven out of the country, not gassed, but simply pensioned—which, together with the retiring of a few thousand

school teachers, would cost from \$10,000,000 to \$20,000,000, a small sum in comparison with the astronomical figures to which we have become accustomed.

I was told that there were no reliable substitutes for these men. But, of course, there are thousands of decent, young, well educated persons who could teach the children and the students—Germans, not Americans, not "conquerors" or even "neutrals," who, even if they are not acquainted with all the fine points of Herder, could nevertheless provide a decent European education.

LET THEM BE DISSATISFIED

I was told that this would cause dissatisfaction in the families. Of course, it would! Without this dissatisfaction there can be no reeducation of Germany's youth. If numbers of Hitler youths broke from their initially skeptical parents, they got their own way in the end and carried the old folks with them.

The central theme in all this is what in the good old times was called "humanist," for even the Nazis were not able to change the course of the stars, the minerals, the plants and their significance. For what is it that makes German school children and students even now bearers of the war bacillus? Nothing but the previous instruction they had in the German language, literature, history and philosophy.

If serious minded young teachers were patiently to explain that the question is not one of Germany alone, but of all Europe, of which Germany is especially interesting to them as their homeland; if they taught them by hundreds of examples the ancient law of sin and expiation; if they proved the falsification of German historians, not sparing the mistakes of other nations, but pointing out their own instead of veiling them; if they showed the young people the best works of German minds and the best customs of the conquerors by example; if they

preached tolerance in national and religious matters and pointed out clearly at the same time that the days of imperialism and colonization are over, then, children and students would rightfully begin to believe them.

The plan can be carried out only under two conditions: new teachers and new textbooks. The future of Germany—and of peace—depends on these and not only on the Saar or the Polish frontier. For in whatever way these problems are solved, there still remains the old stock of teachers whose teaching is based only on the idea of revenge.

When I was traveling through Wurzburg in 1945, I saw the slogan chalked in white on half a dozen walls: "Think of revenge!" And this at the moment of defeat and retreat! Today the leader of obviously the biggest political party in Germany has not feared to say openly: "Complete victory implies complete responsibility."

Under the very eyes of the victors, Berlin newspapers publish articles which, just as in 1920 and 1922, maintain that the whole fault lies with the victors. When, in 1926, I published in the republic a critical book on Wilhelm II, a school director in Freiburg was dismissed because he gave it as a prize.

NEW TEACHERS NEEDED

No one wants to reduce the number of food calories in Germany or to let Germans freeze to death; no one wants to imprison the teachers or professors who shouted "Heil Hitler" for twelve years. But these teachers and professors must be rendered completely powerless, and German youths must be taught by entirely new, decent and, if possible, young people—by Germans, with German books, German histories and German poetry and fiction. Contempt for the republic, with which German children grew up before our own eyes, the mockery directed against the new colors, the songs, the marches, all these were shamelessly exploited by the Nazis a decade before 1933.

The Germans feel rather than think—in which they offer a great contrast to the French—and that characteristic can and must be more carefully exploited in the young and mobile soul and utilized for educational purposes.

Names IN THE NEWS

SUPERINTENDENTS



Paul H. Rehmus

mus will take up his new duties beginning September 1.

Charles R. Thibadeau, superintendent of schools at Stamford, Conn., has resigned to accept a similar position at Belmont, Mass.

Arthur C. Ranheim, superintendent at Rapidan, Minn., has accepted a position as dean of men at Dana College, Blair, Neb.

Abraham Ehrenfeld, **Morris Krugman**, **Joseph O. Loretan** and **George Zuckerman** have been appointed assistant superintendents of schools in New York City. They have all worked their way up in the city school system. Dr. Krugman will assume responsibilities for the board of education's guidance program. The others will receive their assignments before the start of the new term.

Ellsworth B. Holden, formerly superintendent at St. Joseph, Mich., and more recently a doctoral student at the University of Michigan, is now associated with the Warren S. Holmes Company, school architects of Lansing, Mich., as educational consultant and director of public relations.

Selmer Berg, superintendent of schools at Rockford, Ill., has resigned to become superintendent at St. Paul, Minn.



Selmer Berg

Walter A. Anderson, general assistant superintendent of schools in Minneapolis, Minn., has been appointed professor of education and chairman of the department of administration and supervision in the school of education of New York University.

Allen E. Rupp, high school principal at Marietta, Ohio, since 1934, was ap-

pointed to succeed **Harry E. Zuber** as superintendent at Cambridge, Ohio.

MISCELLANEOUS

Richard B. Kennon has been appointed secretary of the National Commission for the Defense of Democracy for Education of the N.E.A., succeeding the late **Donald DuShane**. He has been associate secretary of the commission since 1944.

Romaine Mackie of Columbus, Ohio, has been appointed specialist for schools for physically handicapped children, with the U. S. Office of Education. Dr. Mackie comes to her new position from the California State Department of Education where she was for a year consultant on education of the physically handicapped. She has had twenty years of experience in this field in city and state programs in Ohio, New York and California.

Glenn E. Snow, president of Dixie Junior College at St. George, Utah, was elected president of the National Education Association of the United States at Cincinnati in July. Mr. Snow holds



Glenn E. Snow

B.S. and M.A. degrees from the University of Utah. He has been a teacher and a principal and served for four years in the state senate. He has held his present position since 1941 and has been a leader in local, state and national professional groups. Since 1943 he has been a member of the executive committee of the N.E.A.

Lyman Beecher Stowe has been elected chairman of the board of directors of the National Self Government Committee, succeeding the late **Richard Welling**, founder of the organization.

Hazel Prehm, director of elementary education, Rochester, N. Y., has resigned to take a similar post at White Plains, N. Y.

PRINCIPALS

Robert B. Alexander has resigned as principal of the junior high school at Edgerton, Wis., to become superintendent at South Beloit, Ill. **Russell D. Knapp** has been elected to fill the vacancy.

Hugh M. Kolb has accepted the superintendency of schools at Fairforest, Spartanburg, County, South Carolina. Mr. Kolb was formerly superintendent at Calhoun Falls in Abbeyville County and at Trenton, S. C.

Edward B. Moyer, for the last five years principal of the Horace Hurlbutt School, Weston, Conn., has been appointed superintendent of schools at Briarcliff, N. Y.

Martin H. Kuehn has been named principal of the Technical High School in Buffalo, N. Y. Since 1945 he has directed the veterans' education program in that city. He is the author of "Mathematics for Electricians," a textbook for vocational high schools.

H. Frank Hare, former principal at Liberty High School, Bethlehem, Pa., and for seven years chief of secondary education in the Pennsylvania Department of Public Instruction, has been made superintendent at Phoenixville, Pa., filling the unexpired term of **James H. Seacrist** who resigned to assume new duties.

Hassie Gresham has resigned as principal of Central High School, Knoxville, Tenn., after almost forty years there. **Leonard H. Brickey**, county schools superintendent for twelve years, and a former pupil of Miss Gresham's, will replace her.

Father Harold A. Gaudin, president of St. John's High School at Shreveport, La., has been appointed to serve also as principal succeeding **Father Francis L. Janssen** who will go to Springhill College at Mobile, Ala.

Anna T. Burr, principal of the Bordentown High School, Trenton, N. J., since 1934, has resigned to become educational director of the New Jersey State Home for Girls at Trenton.

Rudolph Fischer, vice principal of the high school at Bonita, Calif., has been appointed principal, the position having been previously administered by **Supt. R. E. Walker** since last year when **George W. Bell**, principal, resigned to become president of Mt. San Antonio College.

Mary Carter, teacher in the Radnor High School, Radnor, Pa., since 1927, has been appointed principal, being the first woman named to this post in the fifty years of the school's history. Miss
(Continued on Page 104.)

SHOULD SALARY INCLUDE DEPENDENCY BONUS?

CECIL L. RICE

Superintendent, Coatesville, Pa.
Formerly, Principal of Radnor
High School, Wayne, Pa.

THE SCHOOL BOARD OF RADNOR TOWNSHIP WITH SCHOOLS AT WAYNE AND ROSEMONT, PA., HAS adopted a \$325 dependency allowance as a temporary expedient to assist teachers with dependents during the cost-of-living crisis.

The bonus is given to any teacher with dependents, regardless of sex, as follows: \$200 for the first dependent, \$75 for the second and \$50 for the third. A dependent is defined, roughly, as any person the federal income tax law will accept as such. Since all faculty members have income tax deduction forms on file, their dependents are easily identified and their dependency allowances can be computed.

The granting of a dependency allowance stimulated a great deal of argument both for and against the plan among faculty members of the Radnor district. The important question is: Shall the dependency clause become a permanent part of the salary schedule? Here are the major arguments advanced by each side.

Pro

The teacher with dependents has a greater need, both now and in the future, than the teacher without dependents. It costs more to house, clothe, feed and educate a family and provide for its health and recreation than it does for a single person to maintain himself. A teacher is entitled to a living wage plus a small amount to save as a college fund for his children.

Radnor has a preparation scale salary schedule and, together with two or three other districts, has the highest wage scale in the state. Until the state takes further strides in raising salaries to a point closer to the Radnor maximum, then the teachers as a whole are in a poor bargaining position.

• • •

The board is not ready to grant rises all along the line or to go out too far ahead of surrounding districts insofar as salary is concerned. Teachers with the greatest need, however, can get the sympathy of the board and more salary than teachers without dependents in the present crisis. The total amount of money available for rises at this time, spread over the entire township faculties, would mean little for any one teacher. Concentrated where the need is greatest, however, it would provide sums that would be of much assistance. The need is greatest among the teachers with dependents.

Radnor seems to be able to attract plenty of teaching applications from women to fill vacancies at the prevailing wage level but finds few men who will accept a position under the present salary scale. Many districts pay men more than women on the basis of sex alone. Radnor makes no sex differentiation in its bonuses for teachers with dependents. Women with dependents get the same allowance as men.

Con

Salaries should be paid on a professional basis for professional services rendered and not on a basis of pauperism. The very name under which the bonus is granted is a travesty on the salaries paid the profession.

No wonder our profession is in ill repute when our basic salary supposedly covers our worth to society, which then must hand out a few extra dollars just to keep our families from freezing! We should never take money on a "cost-of-living basis"! We should not be forced to bow and scrape and thank the public humbly for giving us a pittance. No district or state should sponsor or support any rise based on cost of living. Such a basis is an insult to the profession.

• • •

Equal pay for equal worth and work has long been an accepted practice in free and democratic America. So strongly does the American public feel about this principle that it bids fair to become incorporated into an amendment to the United States Constitution itself, and well it might.

A differential in wages between two teachers working side by side is harmful to morale. Harmony and cooperation are of the greatest necessity in the teaching profession. Anything that tends to create disharmony is not worth the cost. The dependency bonus promises to split any faculty into two camps: the "haves" and "have nots," or, worse still, to foster "a battle of the sexes."

• • •

The federal income tax law already allows teachers with dependents a bonus. The man with a family may have \$300 to \$400 less withheld from his yearly salary than a single teacher with no dependents. Giving him

Pro

It used to be that the position schedule provided more salary for high school teachers than for elementary teachers. Men received more money than most women on such a basis and stayed out of the grade schools. However, the profession now recognizes that there is no difference in the worth of a teacher at various grade levels, thus making it possible for women or men to have a lifetime career in teaching at any grade level, without fear of having to be penalized in salary as a consequence.

In making the adjustment from the position to the preparation schedule, the elementary teachers, mostly single women, get by far the larger percentage of salary increase.

However, living costs advance in greater proportion for a teacher with a family than for a single person. Therefore, during the interim the teacher with dependents must have more money. The dependency bonus is the answer rather than the position type of salary schedule.

• • •

In order to attract people with dependents, more especially men with wives and children or single men who plan on marriage, wages will have to be more attractive. The law of supply and demand still operates and, so long as industry, business and other professions pay men more money than they pay women, the teaching profession will have to compete.

Teaching is a service profession, comparable to the army, navy, post office, interstate commerce commission or any other occupation in which salaries are determined by government. Since government steps in to determine teachers' salaries, society is obligated to pay a living wage on the basis of need. The army and navy pay it outright. Other government agencies resort to subterfuge by merely changing a person's title or else promoting men only to jobs of a supervisory or administrative nature.

• • •

In federal Civil Service only in rare cases does a woman without dependents rise to a job with a P-4 rating. Almost all professional women in government employ are P-1's, P-2's and, only occasionally, P-3's. The P-4's and P-5's are rare. With professional men in government service, the picture is almost reversed. Jobs from P-3 and P-4 up are reserved largely for men. Again, the law of supply and demand operates. Even in banking, chain stores, insurance offices and factories, the key jobs are reserved mostly for men. Even in large assembly line plants, the average salary for men is more than that for women. Need is recognized directly or indirectly.

• • •

Since our public is not ready as yet, on a preparation salary basis, to raise all teachers to a high enough wage level to support a man and his family, the only way to attract and keep good men in teaching is to devise some way to give them enough to live on. Radnor has adopted the dependency allowance as that device.

However, it must be kept in mind that the dependency allowance is granted to both men and women who qualify, for certainly a woman with dependents has every right to as great rewards as a man.

Con

another \$300 to \$400 as a dependency bonus is wrong.

The principle is not followed in industry. What matters if your mailman be single or have 10 children? Wages are the same for all. Store clerks, car salesmen, railroad conductors, bus drivers, coal miners, are their salaries graduated on a basis of the size of their families? Such a principle would be extremely foolish and any business man would laugh it out of court.

• • •

A wife is a cheap commodity to have if one puts her on a dollar and cents basis and gets only \$200 for her. She should be offended!

Suppose a single woman teacher were to enjoy all the advantages provided a man by his wife. It would require a full time maid at a far greater cost than \$200! The single woman teacher, before she goes to school, does her breakfast dishes, makes her bed and sweeps the house. In the evening, she buys the groceries, cooks her dinner, eats alone, then does the dishes again. She washes her clothes and irons the things she washed yesterday. She keeps her household accounts, writes her checks, orders her coal, does her banking, writes all her personal letters, gets her own library books. She eats out a lot to keep from eating alone so much of the time.

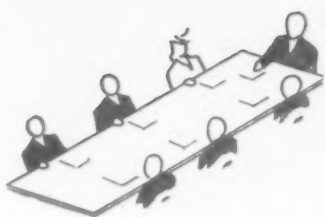
There is no helpmate to do the million and one errands and tasks for her, nor does she get an allowance to hire a maid to do them for her and her entertainment must be largely on a commercial basis. Brother, that all costs money!

Single teachers with no dependents must rely upon savings and insurance as a protection against sickness, old age or bad luck. When worse comes to worst, children are a much better form of old age insurance than anything single women can provide. For contrast, look around and observe the difference between the retired man with his wife and grandchildren and the retired single teacher with no dependents and no one to depend upon.

Yes, we say give the teachers with dependents more money, by all means, but don't neglect the ones who richly deserve just as full a life and who must choose other activities to compensate for the family they don't have often through no fault of their own.

What's wrong with pensions?

In the October issue John W. Lewis, assistant superintendent of Baltimore schools, in an article entitled "The Worm at the Core of Retirement Systems" will point out their weaknesses. You will not want to miss this article.



LET FACULTY HAVE A VOICE

An administrative council, such as that in Carlsbad, N. M., allows it this voice in a way that benefits the entire school system

DURING RECENT YEARS, DEMOCRATIC practices and employe participation in administration in various organizations and enterprises have been the subjects of much discussion. An example of such practice in school administration is the administrative council, which was initiated in the city schools of Carlsbad, N. M., during 1943-44.

The Carlsbad system consists of eight schools, including all grades from pre-first through the twelfth; it serves an area which has an Anglo-American, Spanish-American and Negro population.

The enrollment in all the schools is approximately 3500 and the professional staff numbers 140. Since the system has grown too large for all its units to be well acquainted with one another, the administrative staff realized that much could be gained by a faculty representation in the administration of the schools.

Following is an outline of the Carlsbad administrative council, its purpose, personnel, time and plan of meeting, together with examples of its achievements and work. The account includes a criticism of the existing council's functions and plan of operation and also an evaluation of the council with a view toward future changes.

PERSONNEL

The professional handbook of the Carlsbad school system describes the membership of the administrative council as follows: "All personnel listed hereafter, who are administrative officials, and teachers assigned

to administrative work, and one teacher from each school, elected by the faculty of that unit to serve for a term of one year, constitute the membership of the administrative council, which represents the faculty in administration. . . ."

The administrative officials include all persons who are directly responsible for the administration of the schools. They are the superintendent, the principals, the curriculum coordinators, the nurse, the welfare leader, the business manager and the other special supervisors of instruction.

The teachers who are assigned administrative work are the heads of departments, the chairmen of various committees and the chairmen of other groups within the schools, such as group insurance and credit union.

In addition to these members and the representatives from each school unit, the council has representatives from such civic groups closely allied with the schools as the athletic council, the ministerial alliance, the county budget commissioners, the school bus drivers and the school auditor.

The council is divided into various groups and committees to handle different types of administration. Chief among these groups are (1) the administrative staff, (2) the principals' conference, (3) the im-

provement committee, (4) the advisory committee, (5) the welfare committee, (6) the building committee and (7) the heads of departments.

PURPOSE

The membership and activities of the administrative council make it a democratic organization. It serves in a triple capacity. It is the medium through which others besides the board of education and the superintendent of schools may present ideas, suggestions, criticisms and grievances.

Each representative who is on the council has a voice in its deliberations. Each member of the faculty has an opportunity to show individual initiative and can bring his ideas to the council through the faculty representative of his building or he may attend meetings when he chooses. In this manner each faculty member has a feeling of belonging to the overall system instead of being limited to one classroom, building or field of work. He may feel that he has an active, creative part in administration.

The council serves as a proving ground for suggestions, innovations, temporary plans and proposed changes developed by the administrative staff. Any change that comes from the council, then, is a change that has been processed by both the

administrative staff and the faculty representatives.

The council serves the schools in a third manner. It is a distribution center for information pertinent to all branches of the system. Its building representatives report to their faculties on such topics of interest to all as trends in a proposed building program, plans for participation in a district meeting or plans for some activity in a particular building. The representatives bring to the council specific experiences of the various faculties they represent. The building representatives keep all groups informed of developments in other groups.

COUNCIL MEETINGS AND DUTIES

The administrative council as a unit meets monthly. At these meetings the council works toward the attainment of (1) the objectives set up at its initial organization, (2) the aims of the improvement committee, (3) a definite statement of educational aims in Carlsbad and (4) certain other definite goals, such as are current this year: the improvement of instruction, the bond election and the functional organization of the schools.

COMMITTEES

Each committee is assigned specific duties. It is the responsibility of the improvement committee to evaluate the effectiveness of the schools' programs and to formulate a growing long term plan of improvement.

The personnel committee, which is composed of the superintendent, principals and advisers, makes recommendations to the board of education by way of the superintendent in regard to the election, promotion, transfer or dismissal of employees.

The advisory committee, composed of public spirited citizens, is invited to meet with the council to discuss current and future plans for the schools. The welfare committee plans for pupil and teacher welfare. The building committee helps the board and superintendent in planning for buildings and for the programs to be carried on in the buildings.

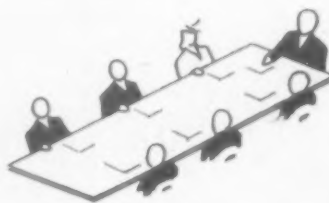
The heads of departments are responsible for conducting surveys of instructional conditions within departments, making reports upon general conditions, appraising and rec-

ommending textbooks, instructional supplies, equipment and library books. All these committees function independently, report regularly to the council and present problems and suggestions to the council for consideration.

COUNCIL'S ACCOMPLISHMENTS

During the period it has been in operation, the administrative council has been instrumental in effecting changes of various kinds in the Carlsbad schools. It has assisted in bringing about desirable changes in the working hours for teachers and in teacher housing. It has proposed a bulletin of information as a means of reducing the number of general faculty meetings. This bulletin was adopted by the administrative staff and is printed and circulated every two weeks. Items for the bulletin come from both teachers and administrators.

The administrative council has assisted the board of education and the superintendent in their efforts to put into effect a better salary schedule for teachers. It has aided in selecting a group insurance plan. Members of the council were valuable assistants in obtaining teachers during the difficult war years by notifying the superintendent of possible candidates and by distributing information concerning the system



to various areas during the summer vacation.

The council has helped in planning better, more efficient faculty meetings. It has made suggestions for changes in administrative practices which will assist in teacher welfare. From the council have come suggestions for instructional changes and for long range planning of educational needs.

The council has justified its existence if for no other reason than by clarifying and strengthening relationships between administration

and faculty. It represents the faculty to the administrative staff as well as the administrative staff to the faculty.

EVALUATION AND CRITICISMS

Although the council has progressed in its work, there is still need for improvement. In the present stage no opportunity is provided for conferences between the faculty and its representative on the council, except for the regular building faculty meetings with the principal. Perhaps more ideas would result from a meeting if the principal were not in attendance.

Since most teachers are hesitant about making suggestions or presenting problems in open meeting, each representative needs to make a definite effort to contact individual members of his school and discuss problems and plans with them. Each member of the administrative staff, in his capacity as an administrator, should take every opportunity to impress upon the faculty the purpose of the council and the importance of the faculty representative in the improvement of the educational system.

One defect in the working of the council, as well as in all meetings in the school, is the time of meeting. No person is capable of contributing constructively to a meeting when he is mentally or physically fatigued. In line with authorities on faculty meetings a suggestion for solving this problem might be the provision of time for the meetings so that they could be held during regular working hours.

More specific committee work would be beneficial to the work of the local council.

CONCLUSION

It is our opinion that the plan for an administrative council is worthwhile and a help to the system. In a recent unofficial survey of the present faculty, opinion was found to be favorable toward continuing the council. Any school system that is open to suggestions and ideas from a majority of its members could benefit from a council of this same type.

Supt. Irvin P. Murphy, who inaugurated the plan of an administrative council, feels that faculty co-operation has improved since the council's organization.

Audio-Visual AIDS

PLANNING PHOTOGRAPHIC FACILITIES

for Secondary Schools

CLARENCE EVAUL

Head of the Science Department
John Marshall High School, Rochester, N. Y.

I HAVE FREQUENTLY BEEN ASKED WHAT facilities should be provided in a secondary school for photographic purposes. Invariably the question has been phrased, "How much space should be devoted to the darkroom and what equipment will be needed?"

The question of darkroom space and equipment is, of course, important. But as an approach to planning school photographic facilities in general, it is an indirect and even backward manner of meeting the problem. This is because, in modern educational procedure, the usefulness of photographic facilities to any school is such that the amount of space to be devoted to the darkroom is only one of a number of problems to be solved. It is much better when considering the installation of a new department or the extension of existing facilities to start with an analysis

of the uses that will be made of school photographic facilities and to proceed from there.

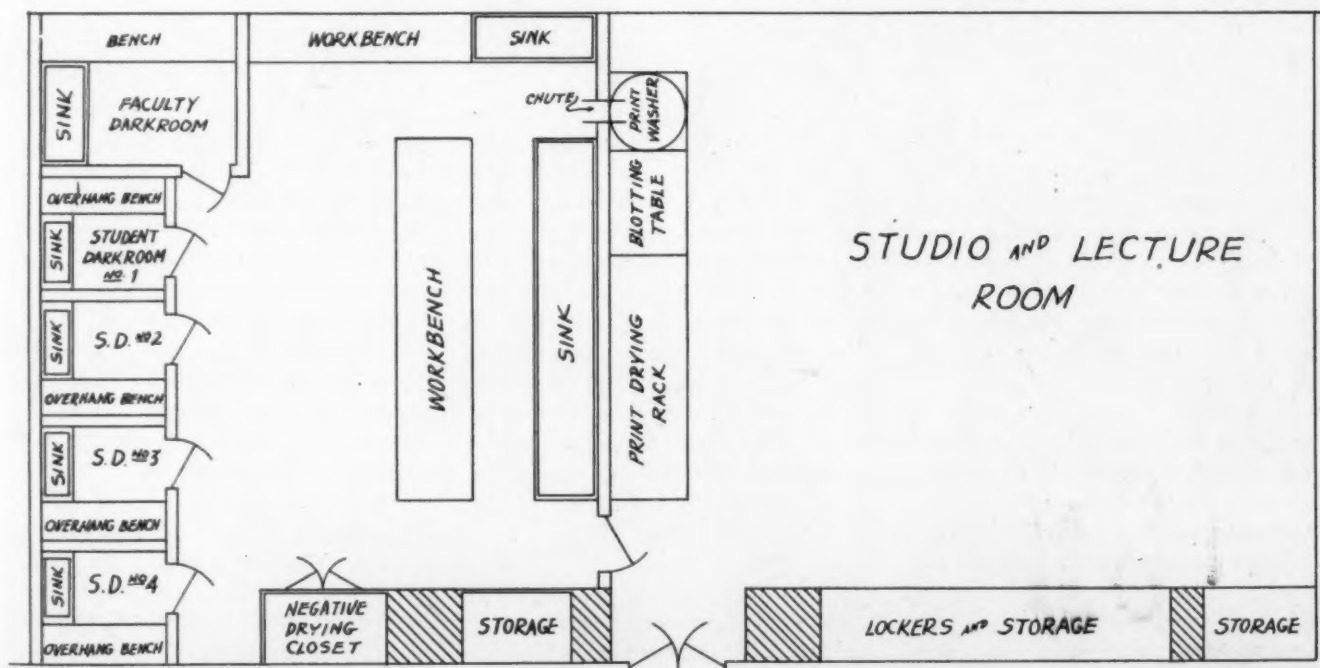
In general, the uses of secondary school photographic facilities are as follows:

1. As a classroom and teaching location for the photographic courses.
2. As a workshop for the journalism group, insofar as facilities are necessary for the production of illustrations for the school annual and other publications.
3. As a workshop for faculty members or pupils working under faculty direction in the preparation of photographic teaching aids.
4. As a laboratory in which science pupils are provided with the opportunity of working out problems

which are concerned with photography.

5. As a meeting place and operational setup for the school camera club.

Obviously, if only one darkroom and one classroom are allocated to fill such needs, serious troubles will arise. A large amount of space, for example, is required for class activities; small quarters are sufficient for faculty and other requirements. Classroom work cannot be interrupted to permit special jobs to be done; faculty members and special pupils should not be expected to delay their work because photographic classes are in session. Film development requires total darkness; printing operations are handled under strong safelights. It should not be necessary to halt one operation for the other and it becomes immediately appar-



ent, therefore, that in planning school facilities each of these needs must be met without jeopardizing the other.

The needs basically fall into two major groups: those of the class and those of the special activities. For the class, there must be a reasonably large lecture room, space in which demonstrations of lighting and photographic technics may be given and adequate facilities for group work in the development, washing and drying of films and prints. For the special groups or individual workers, separate darkroom facilities are essential if their work is not to conflict with that of the class, and separate studio facilities are also highly desirable if much indoor or special photographic work is to be done.

ADVANTAGE OF CENTERING WORK

However, from the standpoint of economy and efficient school construction and operation, the installation of completely separate facilities is undesirable. For one thing, space is always at a premium. For another, costs will zoom if widely separated facilities are constructed. In addition, extra equipment will be necessary because each will require a complete setup instead of making the most advantageous use of such equipment as may be jointly used without trouble. Supervision of pupil activities from a morals standpoint will also be difficult unless all work is centered in one spot.

It is obvious, therefore, that the best plan for school photographic facilities is one that centers all activities in one spot, yet provides group and individual working arrangements so that one does not interfere with the other.

The basis for such a plan is a large combination studio-lecture room which will be used primarily for class instruction. This room may vary in size, but in the space devoted to photography it should bear a relation to the darkroom of 3 to 2. This is because most classroom lectures and demonstrations will be given there.

It will be best if the room is equipped with movable chairs rather than fixed desks so that adequate space for demonstrations of lighting, portraiture and various photographic technics can be obtained without difficulty. The room should also be equipped with shades so that it may be darkened completely, when nec-



"Young Mariners" taken by J. Michael Conner, a pupil at Loyola High School in Baltimore, was judged as the best of all entries in the 1947 National High School Photographic Contest and was awarded the grand prize of \$500. It was the winner, also, of the \$100 first prize in class I.

essary. The electrical installation should be sufficient to handle a large number of lights and pieces of equipment.

Along one wall of this combination studio and lecture room, locker and storage space should be provided, while along the wall adjoining the darkroom, print washing and drying facilities should be installed. A chute to the washing sink should extend through the wall so that developed prints may be inserted in the washer in the darkroom and yet be washed and dried in the light where the instructor can check on pupils' production.

As for the darkroom itself, this should be a large room compartmented so as to provide, first, a large printing room for contact printing and enlarging; second, a number of small film development rooms which can be totally darkened without interfering with printing operations, and, finally, a special darkroom for faculty and special pupil work. Rooms only 5 or 6 feet wide will be adequate for film processing but the special faculty darkroom should be approximately 7 by 9 feet or a trifle larger.

With a layout such as this, many operations can proceed independently and washing and drying facilities

can be jointly used. Thus, installation and equipment costs are kept to a minimum and the maximum use is made of all facilities.

The darkroom, it should be noted, should have its own independent ventilating system. This is a necessity since, in the warm days of spring and fall when the windows are open, central ventilating units are generally shut off for reasons of economy.

As for equipment, each instructor will have personal likes and dislikes. However, it pays from the start to buy only the best products available. Among standard equipment necessary will be a long sink, at least 3 feet wide, for the big printing room, and small sinks, preferably 3 to 4 feet long and at least 28 inches wide, for the film processing rooms and faculty darkroom. Each of the small darkrooms should be equipped with one or more safelights while the large printing room should be provided with sufficient safelights to afford general room illumination and sufficient light above the big developing sink for the instructor to judge properly the development of prints.

STORAGE RACKS ESSENTIAL

Beneath the work benches and sinks, storage racks for trays and equipment should be constructed. Work benches should be covered with heavy linoleum which should also be run up the wall behind the bench to a height of 18 to 24 inches to serve as a splashboard. Linoleum should furthermore be lapped over the edges of sinks and run up the wall behind them to protect the wall from splashing.

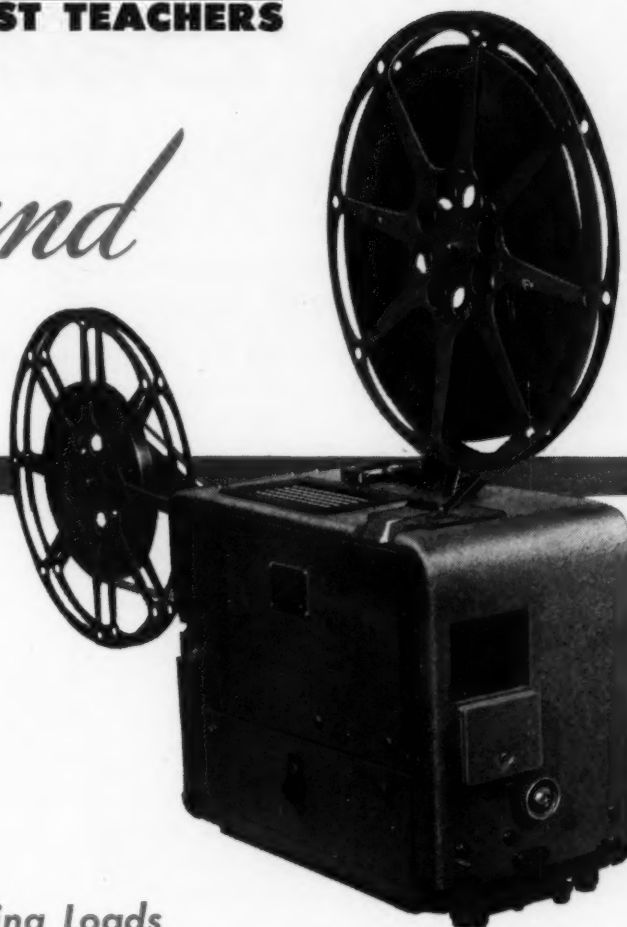
A good height for work benches and sinks is from 28 to 30 inches above the floor. The floor of the darkroom should be of smooth finished cement, with adequate provision for drainage. Attention to small details such as these will make cleaning of the darkroom easier.

By utilizing a plan similar to this, the most efficient layout of photographic facilities can be achieved. This plan will require less space and a smaller investment than if the problem is approached in any other way. And it will provide the photographic instructor and the school at large with adequate facilities for any photographic work which it may be desirable to carry on.

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Food Sanitation

MURRAY P. HORWOOD

Professor of Sanitary Science, Massachusetts Institute of Technology

NO DINING SERVICE CAN BE REGARDED as satisfactory unless it is clean, attractive and safe. Two of the primary essentials for safe and satisfactory dining service are a safe and abundant potable water supply and a safe milk and cream supply. It is important also that every dining service be connected directly to a public sewerage system or to a suitable private means of sewage disposal. Moreover, there should be an ample supply of hot water at all times. Water used for sterilizing dishes should be maintained at 170° F. or higher; for other purposes, at 145°-150° F.

HANDWASHING FACILITIES NEARBY

Suitable handwashing facilities should be provided in all toilets, kitchens and locker rooms. Such facilities should include a combination faucet for hot and cold running water, a sanitary soap dispenser filled with soap at all times, individual paper towels and a suitable receptacle for used towels. Employees should be instructed in the importance of good hand hygiene, particularly after using the toilet, after coughing or sneezing into the hand or a handkerchief, after every time

hands are soiled and before starting work in the morning and after lunch. Too, satisfactory showers should be available for the help. Clean, neat, attractive and washable clothes or outer garments should be provided for the kitchen help.

A suitable system of collecting and storing all garbage and refuse is essential. Such wastes should be stored preferably in a separate room opening to the out-of-doors. The room should have a smooth and entire cement floor and the floor should have a drain connected to the sewer. Doors and windows should be thoroughly screened. The room itself should be ratproof. All refuse should be stored in clean barrels or other suitable receptacles; the garbage, in clean, metal barrels equipped with tight-fitting metal covers.

All receptacles should be placed 1 foot away from the wall on a metal pipe platform or a platform made of concrete strips. The platform should be at least 12 inches above the floor to facilitate cleaning and to prevent the creation of rat harborages. Running hot and cold water and a hose and nozzle should be available for washing garbage and rubbish barrels

and for keeping the floor sanitary.

In regard to infections and poisonings associated with foods, if the foods are clean and wholesome when purchased; if they are bought from a reliable dealer; if meats are stamped "U. S. Inspected"; if the foods are handled by clean, healthy workers who are not carriers of disease, and if the foods are thoroughly cooked and served promptly or, if not served immediately, are refrigerated properly until they are ready to be served, then the danger of food-borne infections will be practically eliminated.

A hazard is introduced as soon as one of these provisos is lacking. Commercially canned foods are invariably safe.

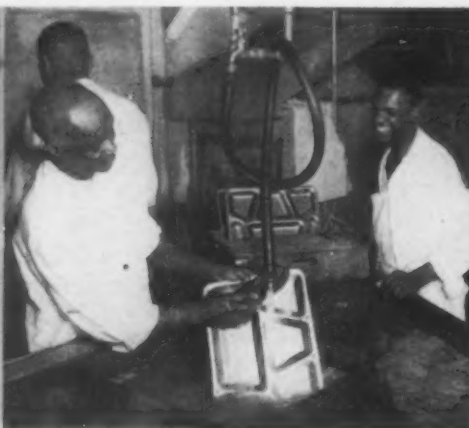
HEALTH OF FOOD HANDLERS

All food handlers should be free of disease and should not be carriers of disease. Individuals who have had typhoid fever preferably should not be employed as food handlers. This becomes mandatory if the laboratory examination discloses that such an individual is a carrier.

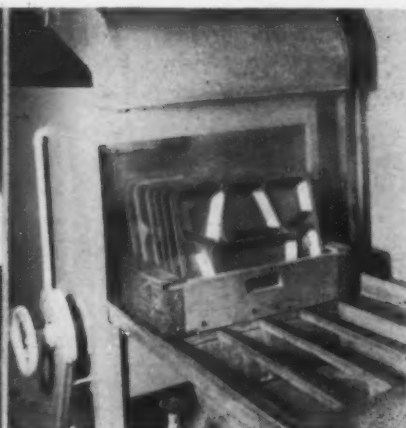
While public health officials do not favor the certification of food handlers following an annual med-



Scraping dishes



Pre-rinsing the dishes



Tray washer

AN ASTONISHING

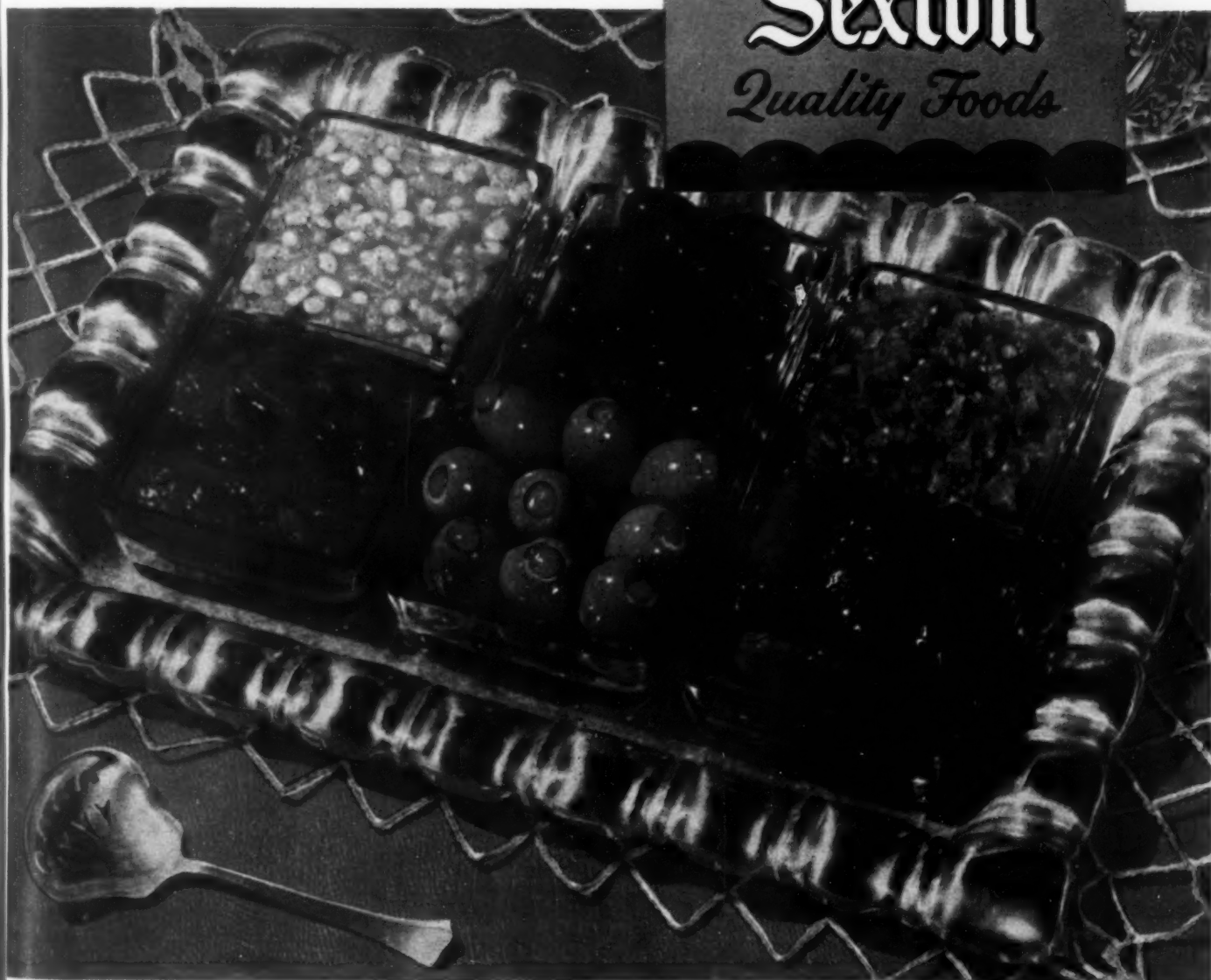
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With this tempting array of olives, pickles and relish your meal is off to a good start. Best of all it will be remembered by your guest long after. Little extras like these bring the public back to you just as you return to Sexton for them. Since variety adds so much to the appeal of your relish dish you will be interested in the unmatched assortment we offer.

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ers are using authoritative materials made available by General Mills to help them conduct special diet surveys among their students. These teachers, aware of the acute need for diet improvement, have made checks of what their children are eating and how each meal contributes to the total day's diet. The results are often surprising, revealing faulty eating habits even in the most well-to-do communities where they are least suspected.

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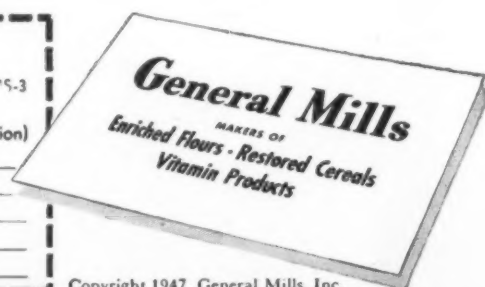
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ical examination mainly because the individual may become infected shortly afterward, it is becoming general practice to require all food handlers to have an annual x-ray examination of the chest for tuberculosis. Food handlers who are ill with respiratory disease of any kind should be encouraged to remain away from work until they are cured. Similarly, food handlers who have suppurating wounds on the hands, neck or any other part of the body should not be permitted to work until the wound has been thoroughly healed. Such individuals may be responsible for cases of *Staphylococcus* and *Streptococcus* food poisoning.

REFRIGERATION A MUST

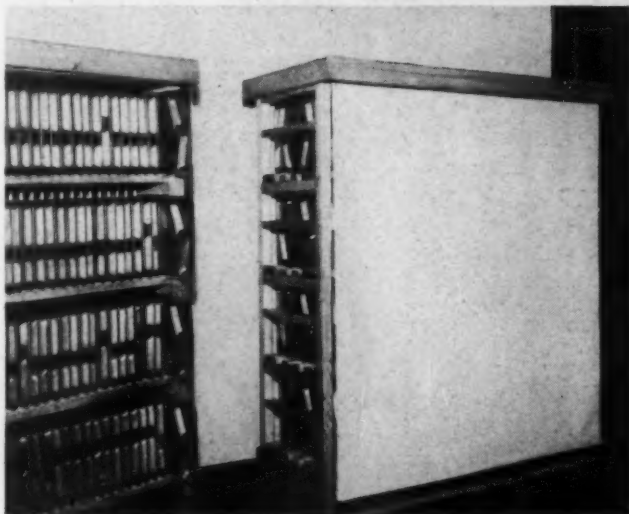
One of the most important requirements of good food sanitation is adequate and effective refrigeration. While health department regulations normally require refrigerating facilities to function at 50° F., it is preferable if the temperature of refrigeration is maintained at or near 40° F. The refrigerator should be clean at all times and the air should be in constant circulation. Foods should be separated to permit the cold air to circulate freely. They should not be packed too tightly for the same reason.

Subfreezing units should be available for meats, ice cream and other frozen foods. All eggs, bakery products, dairy products, custards, cream fillings, meats, meat products, fish, fish products, fresh vegetables, fruits, soups, sauces, gravy and even canned goods should be refrigerated when not in use.

It is a serious mistake to permit any raw or cooked foods to incubate in the warm atmosphere of the kitchen or service room when they are not being used. At such times, decomposition sets in and any infection that may be present is soon multiplied to a hazardous degree. The importance of refrigerating foods satisfactorily at all times when they are not in use cannot be over-emphasized. Most food establishments frequently fail in this practice.

A serious fallacy widely held by many cooks is that prompt refrigeration of hot foods will produce souring. This view was undoubtedly correct in the days of iceboxes, especially in chests that were only partially filled with ice. The introduc-

RIGHT: Arrangement of clean silverware at Graduate House dining service, M.I.T., is neat and safe.



LEFT: Nesting of trays should be avoided. Metal tray racks that allow for drainage are used in Graduate House dining room. Nor should dishes be nested unless thoroughly clean inside and out and entirely dry.

tion of hot foods into such iceboxes caused the ice to melt and raised the temperature to a point favorable to bacterial multiplication and food spoilage.

With mechanical refrigeration, however, the conditions are different. While it may be uneconomical to introduce very hot foods into a mechanical refrigerator, it is undesirable to allow heated or cooked foods to remain in the warm atmosphere of the kitchen overnight or until they are stone cold. This is true of roasts, gravy, sauces, soups, custards and other foods. Such practices are dangerous and lead to food poisoning.

As soon as the excess heat of cooked foods has been dissipated, the foods should be placed in a mechanical refrigerator at 40° F. if they are not to be used immediately. Furthermore, every refrigerator should be equipped with a thermometer at all times and the temperature should be observed by a responsible person several times each day.

Milk should be served only in bottles and should be properly refrigerated at all times. It is a highly perishable food unless it is kept cold constantly. If the milk is not kept in a mechanical refrigerator at 40° F. it should be stored in a shallow pan containing ice water at all times. The level of the ice water should be almost up to the pouring lip of the bottle. The temperature of such milk will vary between 33° and 40° F. If the ice water is not up to the pouring lip, the bottom portion will be cold while the upper part which stands above the water may be warm. From time to time, it will be necessary to draw off some of the water to make room for additional cracked ice.

Cream ready for serving should be stored in a covered dispenser which is thoroughly refrigerated and insulated. The dispenser must have a smooth interior, be free of cracks, crevices and corners and be clean and sterile before it is filled. The dispenser should be emptied each

day at the close of business, taken apart and thoroughly cleaned and sterilized. Every part of the dispenser that comes in contact with the cream must be treated thus.

If necessary a strong chlorine solution should be employed to facilitate sterilization. After this has been done, the empty cream dispenser should be allowed to dry overnight. Precautions should be taken, however, to prevent contamination from the atmosphere as well as from vermin and rodents.

Foods must also be protected con-

everything used in the preparation, serving and storage of food must be made of smooth, nontoxic metal instead of wood. Even the steel runs of the doors of metal cabinets must be kept free of all food accumulations. All drawers should likewise be kept spotlessly clean. The various cutting and chopping implements and machines must be kept similarly free of all particles of food.

At the end of each day, all unused food should be stored in mechanical refrigerators and nonperishable foods should be placed in covered contain-

ducts passing through walls and ceilings must be protected with tight fitting metal guards or the holes surrounding them must be filled in and made ratproof and verminproof. By ratproofing, by eliminating all harborage for rodents and vermin, by protecting all foods effectively and by practicing perfect sanitation the battle against all pests can be successful to an astonishing degree.

However, in addition to these measures it may be necessary to use poisons in order to achieve complete safety. All doors and windows should be thoroughly screened with 18 mesh screening during the fly breeding season. In addition, the screens should be painted or sprayed with a 10 per cent solution of DDT every six weeks from May 1 to October 1. The walls and pipes in the kitchen, workrooms and other parts of the dining service should be treated in a similar manner if a fly nuisance exists. If this is done, the DDT should be applied after all food and equipment are protected.

FOR COMBATING VERMIN

Similarly, in combating vermin, a 10 per cent solution of DDT should be sprayed into cracks and crevices if any exist. Sometimes colored sodium fluoride is used for this purpose. When so employed, care must be taken to avoid contaminating the food and eating utensils as well as other equipment. Combating rodents with traps and poisons is a professional job and should be left to a professional exterminator. The successful use of poisons requires prebaiting and the subsequent use of toxic doses of effective poisons which will be sufficient for the purpose of killing rats. There should also be adequate follow-up work to remove and destroy all dead and trapped rodents. The ordinary operator of a dining service is not qualified to do this job effectively.

The sanitary care of equipment in a food establishment is also of great importance. The nesting of trays should be avoided. To achieve this goal, metal tray racks that allow for drainage should be provided. Similarly, dishes should not be nested unless they are thoroughly clean, inside and out, and are dry.

Metal pie racks should be kept clean and the angle irons on which they rest should be free of all accumulations of food. The racks them-



Desserts being stored for transfer to service counter at Walker-Memorial Dining Service, M.I.T. All racks are clean and covered with clean paper.

stantly against the depredations and contaminations resulting from rodents, vermin and flies. Flies may be a nuisance only during the fly breeding season but the other pests may be present in a food establishment throughout the year. While many establishments employ professional pest exterminators, such measures are only palliative and not corrective. In order to combat these pests effectively, it is necessary to combine constantly perfect sanitation with effective control measures.

Rodents and vermin will not become a problem if they do not have access to food and if all harborage are eliminated.

The floors, table tops, workbenches and all equipment must be kept immaculately clean. All cracks and crevices must be eliminated wherever they occur. Cabinets, table tops, workbenches, equipment and almost

ers. These containers should be both ratproof and verminproof.

Storerooms should be organized so that everything will be kept at least 1 foot off the floor. For this purpose metal shelves or platforms should be provided. Beans, grains and dried foods should be stored in metal containers provided with tight fitting covers. Bags of flour and sugar should be stored on pipe platforms 1 foot from the wall and in small piles so as to prevent the formation of rat harborage and easy feeding platforms. The distance between piles should be 2 feet. All approaches from the floor and walls should be protected with spikes or with stout, smooth sheet metal.

All openings to the out-of-doors should be made ratproof. Similarly, all holes in the floors or walls should be filled in or covered effectively with ratproof material. Pipes and

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selves should be covered with clean paper constantly to facilitate cleanliness. Bread cabinets should be clean and well ventilated and should be free of crumbs. The shelves should likewise be lined with clean paper. Cake cabinets should be treated similarly.

Brooms and mops should be stored off the floor.

Finally, deep fat fryers should be protected against spillage by means of suitable metal guards and the floor and hood should be kept free of all accumulations of grease.

It must be evident that the problem of food sanitation is complex and difficult. The solution of this problem requires knowledge of the principles underlying food contamination, food spoilage and food-borne

TOP: Glass sanitation and refrigerated cream dispenser. **RIGHT:** Incinerator in use for combustible rubbish at Walker - Memorial Dining Hall.

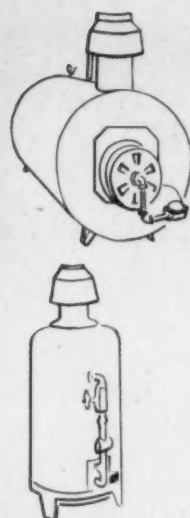
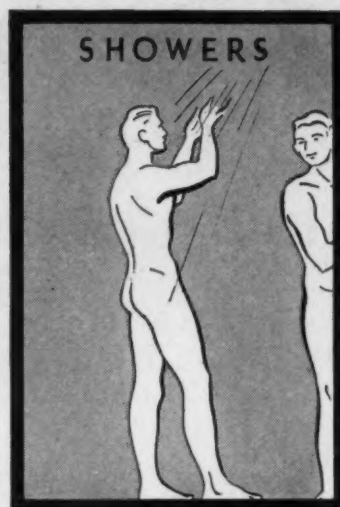


BELOW: View of the sanitary kitchen, also at Walker - Memorial at M.I.T.

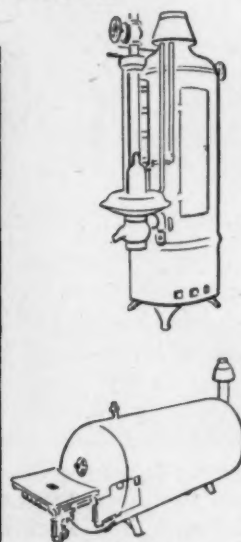
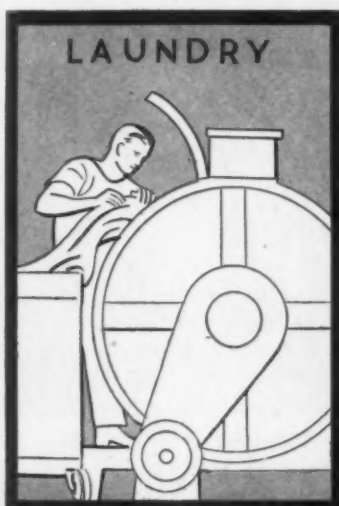


infections. It requires constant care and strict adherence to sanitary procedures. It requires daily intelligent supervision by a responsible person.

While educational measures such as classes, lectures, moving pictures, stereopticon slides and posters are helpful in developing trained personnel, nothing can take the place of careful, detailed instruction by demonstration while the man is on the job. Furthermore, no teacher can be more effective than the boss who takes the time and makes the effort to show the worker how the job should be done. When the operating personnel has been trained in this way to function as an intelligent, efficient team, highly satisfactory conditions will prevail. Then food sanitation will have been achieved and food infections will be under definite control.



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Manufacturers have done and are doing all they can to make equipment as efficient and economical as possible. But the biggest factor in economical operation of a heating unit is the skill of the operator.

SKILLED HELP MOST IMPORTANT

First of all, a janitor, fireman, engineer, custodian—whatever his title may be—should be obtained who knows “what it is all about” and who will endeavor to operate the heating system satisfactorily and economically. The more skilled and capable the operator, the better the heating and the lower the cost. Therefore, the wisdom of procuring skilled conscientious help rather than “cheap” labor cannot be overemphasized.

A wise person has his automobile oiled, greased and given a general checkup before departing upon a long trip. The same principle applies to the school heating system. Before the winter season begins, the heating system should be treated to a complete checkup and cleaning.

The first job is to clean the boiler thoroughly. All ashes should be removed from the fire pot and grates. All flues should be cleaned and the soot removed with a brush or scraper. A small deposit of soot can make a big difference in the efficiency of the heating system.

It pays to be sure that the water in a steam heating boiler is clean for there is a definite relation between the condition of the water and the general overall operating efficiency

of the heating plant. A boiler with clean water has a faster heating pick up and uses less fuel than one which contains dirty water. Clean water also facilitates the dependable operation of safety devices. Water in a boiler may become dirty from a number of causes, such as the deposit of organic matter, rust and scale, dissolved solids caused by intermittent boiling and oil.

Dirty or greasy boiler water will not boil up properly to make what is known as dry steam. The oil forms a blanket at the water line of the boiler. The bubbles of steam rising to the surface, instead of breaking evenly over the whole level, will be hindered or compressed by the oil blanket and will break through spasmodically in spots with increased velocity as a result of the compression.

These conditions which are known as foaming and surging vary with the condition of the boiler water. Dirty water may also cause priming of the boiler, which means that water leaves the boiler to the extent of lowering the water line, with the consequent danger of cracking boiler sections, if it is a cast-iron boiler, or warping tubes or buckling plates, if it is a steel boiler.

SAFEGUARDING STEAM BOILERS

Many steam heating boilers are safeguarded with low water cut-offs and automatic boiler water feeders to protect them against the loss of boiler water caused by priming. However, when boiler water is dirty, there is always danger that some of the solids floating in it may lodge under the seats of these delicate pieces of apparatus and thus make them inoperative.

Dry boilers or flooded boilers can result from this interruption in the

operation of safety appliances. More serious consequences, such as cracked boiler sections or buckled plates, may also result. It is because of the difficulty of obtaining repair parts for boilers under present conditions that the interior of a boiler should be kept clean.

There are a number of warning signs that should be watched. The gauge glass is the first and easiest to see. If the water in the glass is rusty or oily, then the boiler needs attention. In a clean boiler, the water line is fairly steady, never fluctuating more than half an inch either way.

BOILER CLEANER RECOMMENDED

If the boiler needs cleaning, the use of a special boiler cleaning compound to remove accumulated sludge and scale from the interior is recommended. This compound, as well as other special boiler liquids for inhibiting rust or stopping leaks, should be used only by a heating and piping contractor who is experienced in its use.

After the special boiler liquid has been used and all dirt has been drawn off, the boiler is filled with fresh water. Then a special rust inhibitor is put into the water. This retards the formation of rust and scale and aids in keeping the water free from oil.

While dirty boiler water is most disadvantageous in the case of a steam heating system, it is important that the water in a hot water boiler also be clean, particularly if the hot water circulates by gravity. Dirty hot water is known to circulate more slowly than clean water.

Nine out of 10 heating systems now in use could be modernized in some way to a distinct advantage. While it is true that most of them provide plenty of heat for average requirements, they do not produce as much comfort as is possible with the same amount of fuel in an up to date



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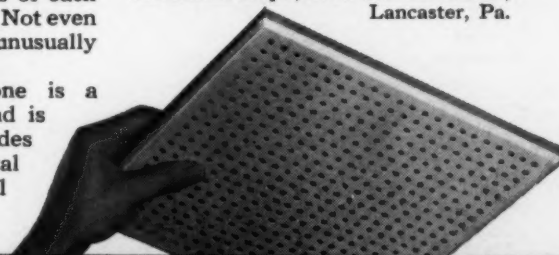
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plant or in a system that has been modernized.

If the system has not been overhauled or inspected for a long time, it is advisable to have it checked by an experienced heating contractor. He will be able to increase the heat output and cut down on fuel consumption by thoroughly cleaning the boiler with special equipment and inspecting all the working parts for any deficiency. If the system burns oil or gas, the services of a trained serviceman are recommended.

If the installation is fairly new, the custodian or building engineer can check the installation himself for repairs needed on the grates or shaker mechanism and see whether or not the fire pot is cracked and needs replacing. If doubt exists about the condition of the heating plant, an experienced heating contractor should be consulted. All doors and openings should be tested to see that they close tightly. Cracks around doors or between sections of the boiler or furnace should be caulked with asbestos cement.

CUTS HEAT LOSS

Radiators should be checked, too. If they are covered with aluminum or bronze paint, they should be repainted. Engineers have learned that bronze paint cuts the heat emission approximately 9 per cent. A light colored flat oil paint will correct this deficiency easily and economically. It's the finishing coat that counts, not the underneath coat.

The air vents also need checking. Vents cost little, considering the job they do. Proper air elimination results in substantial fuel savings. Ordinarily, vents should be replaced every seven or eight years and failure to replace them is to deprive oneself of the advantages of a smoothly functioning heating system. It has been said that a steam radiator is only as good as its vent valve, for unless both are functioning the system does not operate efficiently.

Obstructions or air leaks in chimneys waste coal and greatly impair the efficiency of the heating plant.

If the heating plant is equipped with a stoker, it is advisable to have it cleaned and all working parts examined. On other automatic systems the motor and all the moving parts should be oiled and checked for any possible defect.

Before beginning to use the heat-

ing system, it is advisable that the janitor or custodian make a preliminary study of the operations manual or sheet of instructions that the manufacturer of the heating system has prepared.

When ready to start the fire, draw off enough water from the system to remove sediment and dirt and fill with fresh water to the prescribed capacity, if a steam or vapor system. In case of a hot water system, fill to the proper level at expansion tanks. Then carefully inspect all control devices and see that they are properly adjusted and are functioning.

Fuel is often wasted because of improper operation of an automatic control apparatus. After an idle period, controls may stick or operate slowly due to corrosion of moving parts, accumulation of dust or dry bearings.

If the heating system is operated by gas or oil, the job of lighting the fire in the fall is simple. However, if coal is used, the process is a little more involved and it is advisable to read the directions thoroughly in the manual for the special type of coal that is used, bituminous or anthracite coal or coke.

There are several recommended firing methods and they all have their good points. Select the method which gives the best results and continue to use it.

TIPS ON FIRING

No matter which firing method is used, the following operational tips will help to save coal.

- (1) Keep fire door closed and door damper open.
- (2) Don't use the ash pit door for air regulation—use the damper.
- (3) Banking the fire with ashes causes clinkers.
- (4) Go easy on the shaker.
- (5) Use the poker sparingly.
- (6) Keep the ash pit cleaned out.

Another helpful suggestion is to keep the grates covered with ashes. Shake the grates gently, keeping a thin layer of ashes on them in cold weather, a deeper layer in mild weather. This helps hold the fire and keeps it burning evenly; it also protects the grates. Finding the particular depth of fuel bed that works best, the proper adjustment of the dampers and the time to open and close them to meet changing temperatures are all points that must be learned for the successful operation

of a heating system of this type.

An open chimney is a serious "heat thief." That is why a stack damper is provided to control the chimney's draft. The stack damper should be kept as nearly closed as possible without permitting smoke to come out the fire door. Much of this work is done automatically if the building is heated by oil or gas. If the plant is fired by coal, the use of a stoker is recommended.

The advantage of stoker firing is not merely that it does away with the manual labor in using coal but also that it makes possible a better utilization of fuel. Through more scientific firing and closer control of combustion, a stoker provides economy in fuel and more uniform heating.

DRAFT CONTROL PROBLEM

With regard to the problem of air or draft control, there is much that has to be learned by experience, for from 12 to 20 pounds of air is used for every pound of coal used. Since a pound of air at room temperature occupies about 670 times as much space as a pound of coal, the importance of controlling the amount of air that goes through the furnace or boiler in a given amount of time is self evident.

A word about safety: Controls are perhaps the most important factor in safe heating. They may be termed the brains of the heating plant. They prevent overheating and explosions.

Safety valves provide relief by opening when a dangerous pressure is reached. Safety controls also have been perfected for automatic systems which cut off the burner when the water level becomes dangerously low and thus prevent a cracked boiler. Controls for shutting off the oil or gas supply when the burner goes off are especially important in preventing explosions with automatic systems.

A survey of the records of 100 city fire chiefs indicates that automatic safety controls have been important factors in reducing the number of fires caused by overheating. Therefore, the need of equipping a heating system with the proper safety controls should not be overlooked.

If a heating system is kept in good repair, proper firing methods are employed and a steady, year-round maintenance program is followed, there is no reason why heating costs cannot be kept at a minimum.

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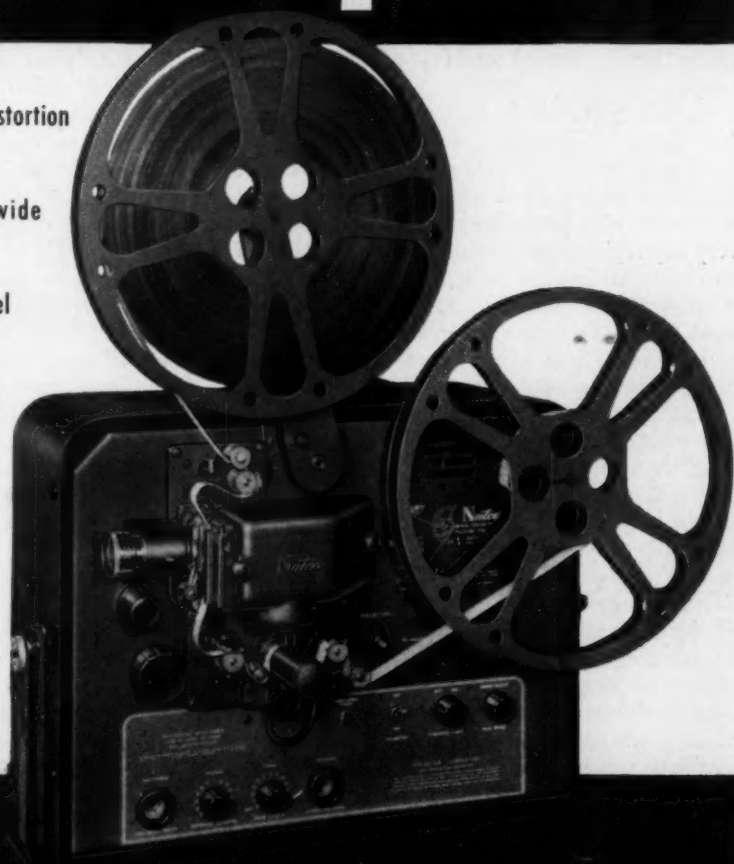
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NEWS

New Military Training Proposals Made . . . School Lunch Funds Greatly Reduced . . . National Science Foundation Vetoed . . . Federal Aid to Education Shelved . . . T-Day Resolution Affects Veterans' Benefits

New Military Training Bill

By HELEN C. BROWN
Staff Correspondent

WASHINGTON, D. C.—Congressman Towe on July 18 introduced H.R. 4278, the "National Security Training Act of 1947," to provide military or other training of all qualified males. The bill is a modified form of H.R. 4121, introduced by him earlier. Based on the report of the President's Commission on Universal Training it seeks to legalize the sections dealing with training. It was approved by the armed services subcommittee.

This bill, which will carry over to the next session of Congress, requires that every male between the ages of 17 and 20 register with a local selective service board and, after the passage of the act, every boy register upon reaching his 17th birthday. All males, except those deferred within regulations to be established by the President or prescribed in the bill, must serve a minimum of one year in the national security training program. If physically qualified, they must serve in the army, navy or marine corps; those not physically qualified, or conscientious objectors, must serve one year in a federal training program authorized by the National Security Training Commission.

Those assigned to the armed forces will have training for one year. The first six months is given over to basic military training. Then, within quotas to be established by the President, the trainees continue basic training for six months or serve an equivalent period in any one of the following by (1) voluntary enlistment in any of the regular services; (2) enlistment in the National Guard or organized naval or marine corps reserve; (3) enlistment in the enlisted reserve corps of the army; (4) entrance into the military, naval or coast guard academies; (5) enrollment in the naval or marine corps officers procurement program; (6) enlistment in the enlisted reserve corps of the army or navy and assignment to a college course

including R.O.T.C. or N.R.O.T.C. under agreement to accept a reserve commission; (7) enlistment in merchant marine reserve or U. S. naval reserve and entrance into either of their academies under agreement to accept a commission; (8) enlistment in the enlisted reserve corps of the army, navy or marine corps and pursuance of an approved course of technical or specialized training in a school approved by the head of the appropriate department, and (9) enlistment in the enlisted reserve corps of the army or volunteer naval or marine corps reserve for six years to include six one-month periods of training.

Trainees assigned under (6) and (8) of the foregoing may receive military scholarships but are obligated to serve in one of the armed forces upon completion of training for a period determined by the President.

High school pupils may continue school until graduation or 20 years of age, whichever is earlier.

Each trainee will receive \$30 a month in cash. If he has dependents (to be determined by the local selective service board) the dependency allowance, paid by the government, without deduction from the trainee's pay is \$50 a month for one dependent; \$65 a month for two or more.

The training program is to be administered by the armed forces but is under "general supervision, inspection and control" of a three member commission, one of which shall be a member of the armed forces. The bill provides for a civilian executive secretary of the commission and general advisory board of from 10 to 25 members, principally civilians, but not less than three shall be from the armed forces.

Science Foundation Bill Vetoed

WASHINGTON, D. C.—President Truman on August 6 vetoed "with deep regret" S. 526 authorizing establishment of a National Science Foundation, stating that while he had urged the establishment of such a foundation, the bill

sent him by Congress was so "complex and unwieldy" that it would be more likely to impede rather than promote the government's efforts to encourage scientific research. The bill sought to establish the foundation as an independent agency of the government for promoting research in national defense and other fields, abolishing the present Office of Scientific Research and Development.

\$65,000,000 for School Lunches

WASHINGTON, D. C.—A meager school lunch program is assured for 1947-48 as a result of last minute action by the Congress in appropriating \$65,000,000 for the purpose.

This is \$16,000,000 less than the amount appropriated for the current year. A proviso that no part of the appropriation may be used for equipment will limit the expansion of the school lunch program, especially to small schools in the poorer rural areas. Last year, \$10,000 was allowed for the purchase and maintenance of necessary equipment.

The House action, excluding money paid by children as a part of the states' funds for matching federal appropriations, was reversed in final action by the Congress. Thus, it will be possible to count the income derived from the sale of lunches to school children for matching purposes. Since the states and municipalities in 1946-47 had appropriated only \$11,470,000 for school lunches, this concession in legislative policy was vital to the success of the program.

However, the committee report which recommended this provision warns that the conferees of both the House and the Senate wish to emphasize that the lunch program is essentially local and that the states have not done their share in complying with the spirit of the matching provisions contained in the National School Lunch Act. The conferees also call attention to the fact that many state legislatures adjourned without taking action to provide funds for the school lunch program. Therefore, in connection



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NEWS

with a reexamination of this matter for the fiscal year 1949, the conferees are now placing the states on notice with regard to their respective obligations under this program and warn that failure of their legislatures to act will have no effect in determining the future requirements of the program.

Welfare Bills Shelved

WASHINGTON, D. C.—In spite of generally favorable hearings on both the public health bill and the bill to provide

federal assistance for school health services, neither was reported out of committee.

The federal aid to education bill came up twice on the Senate calendar but was passed over both times. No action was taken on it by the House committee.

The bill to create a separate Department of Health, Education and Security was also passed over by the Senate and was not acted upon in the House committee to which it was referred.

These and other bills on which no

action was taken remain in status quo and can be taken up by the Congress when it reconvenes in January. That they will be given early consideration was indicated by Senator Taft when he declared recently: "Republicans agree that action must be taken to improve health, housing and education. Federal assistance in fields of social welfare is definitely on the list of action in 1948."

Lanham Act Aid Continued

WASHINGTON, D. C.—The Congress authorized the extension of federal aid under the Lanham Act to schools still overburdened with war-increased enrollments. A total of \$5,000,000 was appropriated for this purpose for the current fiscal year ending June 30, 1948.

The bill authorizes the Federal Works Agency to continue to make contributions for the operation and maintenance of school facilities in some 180 school districts. These districts have an enrollment which is 115,000 in excess of that in the same schools during the last pre-war normal year.

VETERANS

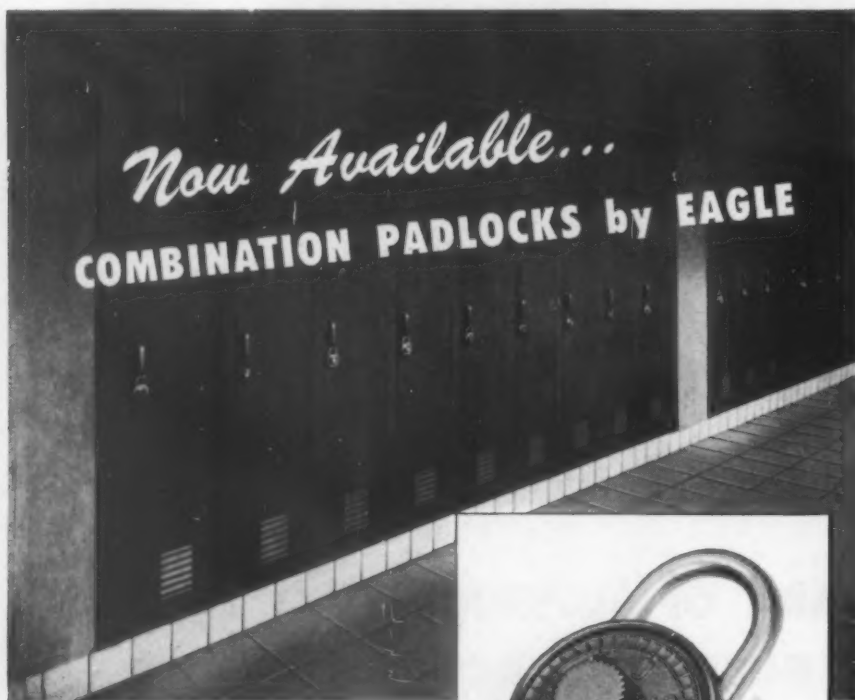
G. I. Subsistence Legislation

WASHINGTON, D. C.—Legislation enacted in the first session of the 80th Congress to increase subsistence allowances for veterans affected only those with 30 per cent or more disability. For this group, the minimum subsistence payment for the veteran without a dependent was increased from \$105 a month to \$115 and for those with one dependent from \$115 to \$135. Allowances for children were increased to \$20 (formerly \$10) a month for the first child and \$15 (formerly \$7) for each additional child. No change was made in the former allowance of \$15 a month for a dependent parent.

Although the Senate had passed a bill to increase subsistence payments to full time veteran students in institutional training and the House committee on veterans affairs had reported out an identical bill, the House adjourned without taking action.

Likewise, no action was taken by the House on the bill to increase the combined subsistence allowance plus earned income for employed veterans taking education or training, although this bill, too, had been passed by the Senate.

The report of the Senate committee on military affairs in reporting out S. 1394 stated that it was "its responsibility" to make it crystal clear to the veterans of the country that it was never the intention of the Congress when it passed the



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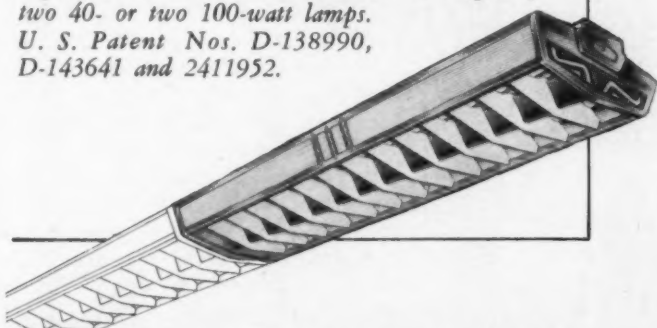
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NEWS

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Limits Set by T-Day Action

WASHINGTON, D. C.—By last minute passage of Joint Resolution 123, the Congress set "Termination-of-War-Day" and, on July 25, the President signed the bill that brought to an end 175 wartime legislative measures.

Included in the T-Day Resolution is the termination of veterans' benefits. Men

and women who enlist after July 25, 1947, will be ineligible for veterans' benefits of education, war risk insurance, unemployment compensation, G.I. loans, preferential employment and education.

Those who enlisted just prior to July 25, who serve a minimum of 90 days and are honorably discharged, will be eligible for veterans' educational benefits for one year, plus the number of days of active duty between date of enlistment and July 25, 1947. Men and women who

enlisted during the period Oct. 6, 1945, to Oct. 6, 1946, under the Voluntary Enlistment Act of the 79th Congress, will continue to accumulate time entitlement for educational benefits up to the maximum of four calendar years. Other military personnel earning a month's educational benefits for each month of service ceases to earn such credit after July 25, 1947.

This date also begins the period of terminating eligibility for training and education under both Public Laws 16 and 346. All present veterans must begin their education and training prior to July 25, 1951, and conclude it by July 25, 1956. Other members of the military personnel now in the armed services who will be eligible for G.I. education will be allowed four years from the date of their discharge to begin their education and nine years in which to complete it.

Unemployment allowances will cease two years after T-Day. G.I. loans can be obtained any time within ten years of this day.

Sub-College Education for G.I.'s

WASHINGTON, D. C.—A report of a special committee of the veterans education council of the N.E.A. urges expansion of vocational and technical training for veterans.

Pointing out that present educational facilities are grossly inadequate to meet the needs of veterans who wish to enter training of less than college grade, the committee proposes that an effort be made to provide such facilities. Such effort should be primarily on a community and state basis, especially by smaller communities banding together to develop a training center. The first need is the unqualified support of industry, labor, educational institutions and veterans' organizations.

In stressing the need for a different kind of secondary education to meet the needs of veterans, the report continues: "A point of view must be brought to the problem and to whatever programs develop, that is flexible in nature and is willing to abandon the traditional secondary college pattern of education. Such flexibility would result in the establishment of courses which would pay little attention to formal prerequisites but rather to ability, the desire to achieve and placement opportunities."

Ruling on Terminal Leaves

WASHINGTON, D. C.—The Veterans Administration has announced that military personnel being separated from the armed forces may use its terminal leave orders as a basis for obtaining a temporary certificate of eligibility for education and training under the G.I. bill.

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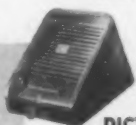
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The temporary certificates, issued to all applicants who have eight or more days of terminal leave, are valid for six months during which time the regular certificate of eligibility and entitlement will be issued. This procedure makes it possible for service personnel to enroll for training and education while in separated status but no subsistence will be paid until formal discharge from the armed forces.

Veteran Students Study by Mail

WASHINGTON, D. C.—Sixty colleges and universities and 70 trade and business schools have been approved by the Veterans Administration for giving correspondence courses to more than 150,000 veterans. The veteran taking only correspondence courses under Public Law 346 is not entitled to payments for subsistence.

On-Farm Training Bill Passed

WASHINGTON, D. C.—The bill authorizing institutional on-the-farm training of veterans under Public Law 346 was passed by Congress. The act presumably provides full time training status for veterans in on-the-farm training and sets minimum standards for such training.

The course must include 200 hours a year of organized group instruction in agricultural subjects in an approved educational institution and supervised work experience on a farm or other agricultural establishment. Supervision by the instructor of the course in which the veteran is enrolled for institutional training must also include a minimum of 100 hours a year for the veteran operating his own farm and 50 hours if he is employed on the farm of another.

ADMINISTRATION

New Emphases in History

WASHINGTON, D. C.—The 17th Yearbook of the National Council for the Social Studies of the N.E.A. presents newer interpretations and emphases in the teaching of American history.

The editor of the publication is Richard E. Thursfield and 28 leading scholars and educators contributed to it. Separate sections are devoted to: the function of American history in one world; American history and its allies; vertical articulation of the American history program; methods, materials and resources in American history; evaluation and tests, and history teachers and their preparation.

Would Lengthen School Day, Year

STATE COLLEGE, PA.—Longer school hours and a longer school year may be one solution to the rising number of



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spending money, Dr. Vincent thinks the school should arrange part time employment in wholesome environments. He sees the proper type of employment as highly educational and the handling of spending money as something that should be learned by children as soon as possible.

For farm pupils Dr. Vincent would increase the opportunities for club work, recreation and activities in rural schools. Living on a farm in itself has educational value and might well be consid-

ered in the planning of the rural school program.

Exempted on Religious Grounds

FRANKFORT, KY.—Exemption of public school pupils from taking the required course in health and physical education because of religious objections to the teaching of the characteristics and symptoms of disease has been approved in Kentucky, under an opinion of Eldon S. Dummit, state attorney general.

The *Christian Science Monitor* reports that the attorney general further ruled that there was nothing to prevent the state board of education from exempting children who objected on religious grounds from school medical examinations.

Petrillo Lifts Ban

WASHINGTON, D. C.—Schools and military bands can now make broadcasts and recordings without the interference of James C. Petrillo and the American Federation of Musicians. Mr. Petrillo agreed on July 23 to rescind his long-standing ban on these activities at a meeting with a group of musical educators and military officials.

Both groups were given permission to broadcast and to make as many records as they want, provided the records are for the exclusive use of schools, colleges and the armed services. The agreement covers the National Music Camp at Interlochen, Mich., where Mr. Petrillo imposed his ban two years ago which resulted in the enactment of the Lea Bill by Congress and the restriction of some of Mr. Petrillo's activities.

A committee, including L. A. Richman, president of the Music Educators Association; J. C. Kendel, vice president of the association, and C. V. Butterman, its executive director, was appointed to draw up a code of ethics for recording and broadcasting which will cover all school groups in the nation.

Fewer Large Classes in N. Y.

NEW YORK CITY.—According to the bureau of reference, research and statistics of the New York City board of education, the number of classes of 45 or more pupils in public elementary schools has dropped since last October from 18 to one. The number of classes of from 40 to 44 pupils has decreased from 404 to 90 and those of from 35 to 39 pupils have fallen from 4526 to 2763.

Appointive vs. Elective System

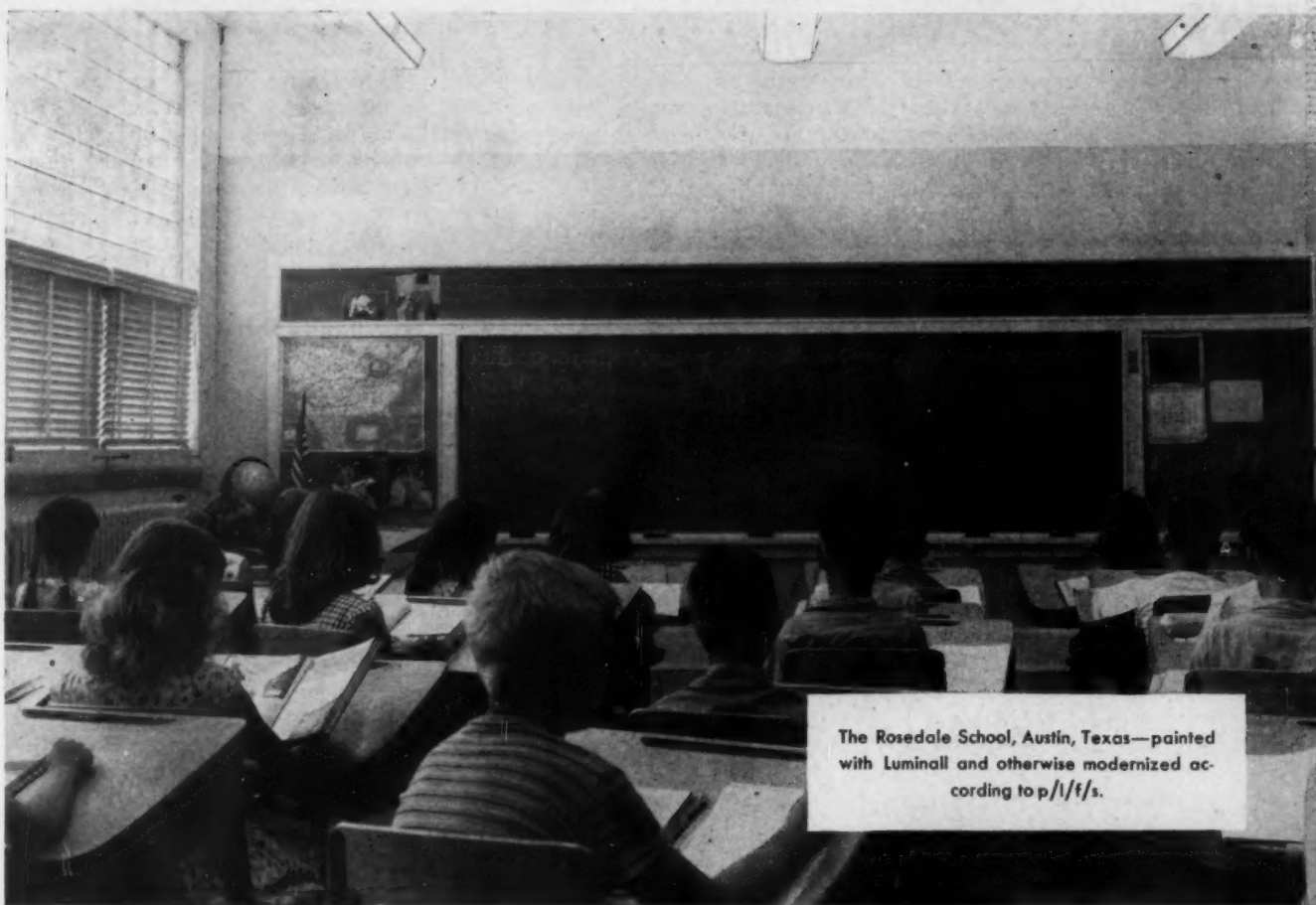
ATHENS, GA.—As a partial requirement for the Master of Science in Education degree, a graduate student in the college of education at the University of



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Georgia made a comparative study of the methods of obtaining county boards of education as is done in Georgia, where members are appointed by the grand jury, and in Alabama, where they are elected by the people. His survey took in 72.3 per cent of the county boards in Alabama and 54.8 per cent of those in Georgia.

His conclusion was that the elective method of obtaining board members was better than the appointive method. He found that the board members in Ala-

bama were better qualified than those in Georgia. An average of 94 per cent of the Alabama members were leaders in community organizations as against 25 per cent in Georgia.

Court Rules Segregation Illegal

LOS ANGELES.—The Ninth U. S. Circuit Court of Appeals has upheld the decision of the Southern California district court in ruling against the right of school districts to segregate Mexican and Latin-American children.

Although the decision was based only on the question of whether or not the California statutes authorize segregation, national organizations interested in this issue believe that it signals the opening of a legal campaign to have segregation declared unconstitutional, even when physical facilities for education are equal.

War Babies Swell Enrollments

WASHINGTON, D. C.—The U. S. Office of Education estimates that the upswing of the birth rate which began with mobilization for war will increase first grade enrollment in elementary schools this fall by 9 per cent over September 1946.

However, this increase is only the beginning. The Bureau of the Census estimates that there were more than 3,600,000 more babies born in the United States from 1941 through 1946 than in the same period from 1935 through 1940. The birth rate increased rapidly through 1943, leveled off somewhat during 1944 and 1945 but soared again to an all-time high of 3,260,000 births in 1946, a 50 per cent increase over 1940.

It will require a minimum of 100,000 new classrooms and additional teachers over the next five year period to meet the need as the increase in enrollment moves up through the elementary grades. The need will be especially acute since it comes after a six year period of little school construction and a sharp decrease in the number of trained teachers.

Relative to teaching staffs, Ralph McDonald, executive secretary of the national committee on teacher education and professional standards of the N.E.A., states:


"In 1941, United States colleges were turning out elementary grade teachers at the rate of about 20,000 a year, far below the number needed. This year there were not more than 12,000. What the need may be in the next few years, when enrollments increase tremendously, it is hard to estimate.

Another factor which adds to the problem of financing education in the immediate future is that the increase in elementary school enrollment comes at the same time as the even greater increase in college and university enrollment and the expanding demands for secondary education.

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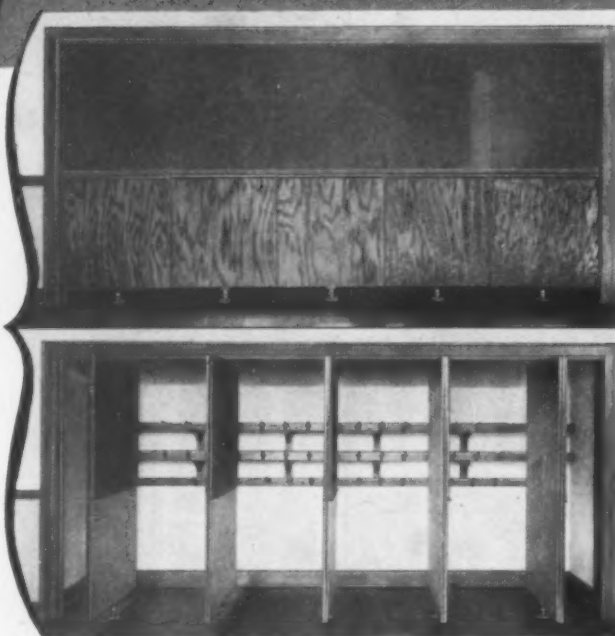
Receding Door Wardrobes



No. 883

MULTIPLE OPERATION WARDROBE

Showing a 5-door multiple operation unit with blackboards and metal chalk trays mounted to doors. Master door at left. Furnishings include continuous hat and coat racks with two shelves, three hook strips, and double prong hooks. Note absence of floor track.



For many years, Richards-Wilcox School Wardrobes have been recognized as outstanding for three important reasons—simplicity, utility and low cost. With ever-increasing enrollments, even the problem of what to do with Johnny's hat and coat is a serious one. Because the Richards-Wilcox line of school wardrobes is *complete*—a wardrobe to meet every requirement and situation—more and more schools throughout America are

specifying R-W equipment.

R-W School Wardrobes are available, completely furnished, with any number of individually or multiple operated doors required to accommodate a specified number of pupils. Combinations of pupil's sections, bookcases, supply cabinets and teacher's wardrobes also are available. Your nearest Richards-Wilcox office will gladly furnish complete information on request.

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TEACHER TRAINING

Teachers Study Aviation

PROVIDENCE, R. I.—A five day program for teachers of aviation subjects was held recently at the Rhode Island College of Education summer school under the

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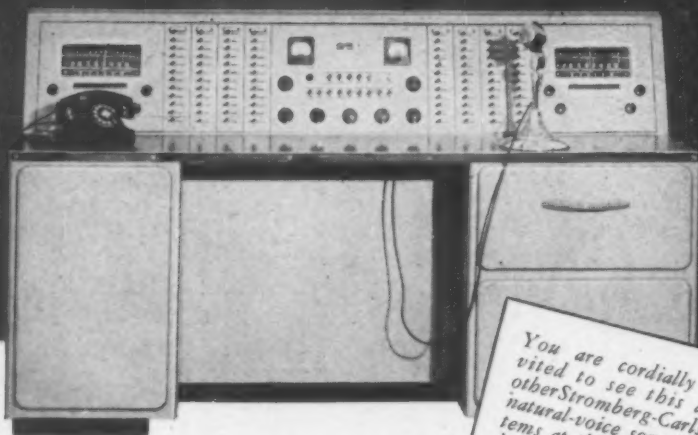
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You are cordially invited to see this and other Stromberg-Carlson natural-voice sound systems at the N.E.A., Atlantic City Auditorium, Booths J-41 and J-43, March 1-6.

Yes, the schoolhouse has grown—in area and stature—making strenuous demands even on today's highly qualified teacher.

But Stromberg-Carlson has kept pace with these demands. The Model 1200 School Sound System shown here is a good example. It is economical yet the ultimate in school sound systems. It incorporates all the standards recently established by leading educators and engineers in cooperation with the United States Office of Education and the Radio Manufacturers Association.

Compact, yet complete, with this model students can actually operate their own "radio station"...can gain experience not only in the art but the science of sound. Flexible, the

whole school or a single classroom may be reached at any time.

Its many features include full two-channel operation with optional communications channel, two radio tuners each with one AM and two FM and short wave bands, and a 78 or 33 1/3 RPM record player for 16 inch transcriptions. Completely equipped for 48 room speakers and wired for an additional 48. Housed in trim glacier grey steel cabinet with 6 ft. by 14 inches of clear desk space.

Write for free booklet. Address: Stromberg-Carlson Co., Sound Equipment Division, Dept. S-9, 100 Carlson Road, Rochester 3, New York.



STROMBERG-CARLSON

NATURAL-VOICE



SOUND SYSTEMS

sponsorship of the state department of education and the Civil Aeronautics Administration.

Twenty-five teachers, most of whom were women, began their instruction by "flying" in a Link Trainer set up in the college gymnasium under the supervision of a former Wave, now with the Link Aviation Company.

Besides listening to lectures, the class inspected the airport at Hillsgrove, where flights were offered by experienced pilots. The course closed with a lecture by Prof. John Gammons Read on "Teaching Aviation in the Public Schools."

A class in audio-visual aids sat in while demonstration material was being used and a class in geography did the same when material on developments of the air age was presented.

For Teachers of Handicapped

BUFFALO.—The New York State College for Teachers has five new curriculums for training teachers in the education of handicapped children. These have to do with the education of (1) the hard of hearing, (2) the mentally retarded, (3) the orthopedically handicapped, (4) the partially sighted, (5) children with speech defects.

Students entering the college may enroll immediately in the department of education for handicapped children or may defer their decision until the beginning of the second semester of the sophomore year. In either case, all students will study elementary education for the freshman year and enroll in special education during the first semester of the sophomore year.

Further information may be obtained from Dr. M. H. Fouracre, New York State College for Teachers, Buffalo 9.

Scholarships Go Begging

RICHMOND, VA.—The Virginia legislature, at the request of Gov. Tuck, authorized \$330,000 for a teacher scholarship fund in an attempt to obtain more qualified teachers for Virginia's schools. Under the plan, a beneficiary can "write off" the entire amount of the scholarship by teaching a stipulated time.

The fund provides for 1000 scholarships of \$300 each and 300 of not more than \$100, the latter for summer school study only. By the end of July there had been only 121 applicants for the summer scholarships. The \$300 scholarships are intended for students wanting to undertake teacher preparatory work but only 69 applications for these were approved.

Teacher Exchange Under Way

WASHINGTON, D. C.—One hundred twenty-three United States exchange teachers left New York August 18 for England and a similar number of British teachers will come to this country.



"More high school graduates showing scientific promise must be encouraged to take advanced college training" —ALAN VALENTINE, President
The University of Rochester

Unfortunately, many high school graduates of exceptional scientific ability are forced to choose a job. Financial requisites set up too great a barrier. According to Dr. Bush's study*, it takes 1000 fifth-grade pupils to make 72 college graduates.

If our war-depleted supply of scientific manpower is to be replenished, we've got to provide more substantial assistance to a greater number of high school graduates who qualify for college scientific work.

We must aggressively support the various governmental programs now in effect or under consideration, which include scholarships in science.

We should promote and help formulate an increasing number of science scholarship programs in private industry.

We must make every effort to increase America's force of scientific personnel.

*Science: The Endless Frontier



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THE FUTURE OF AMERICA DEPENDS ON SCIENTIFIC LEADERSHIP

NEWS

The exchange was arranged with elementary and secondary schools in 31 states, each teacher taking the position of the one in the other country for whom she is substituting.

Last year only 74 teachers participated in the exchange program, but Commissioner Studebaker stated: "Enthusiastic reports from last year's exchange of teachers indicate the value of the program in interpreting our education and our way of life to the people of Great Britain. From the standpoint of the par-

ticipating teachers, the experience was stimulating and enriching."

TRANSPORTATION

F.P.H.A. Rules on Surplus Buses

WASHINGTON, D. C.—The Federal Public Housing Authority has issued a revision of its regulation pertaining to procurement of surplus transportation facilities for educational institutions.

By the new policy, F.P.H.A. will no longer assist educational institutions in obtaining facilities to transport students or faculty between temporary housing used on site and the college. The function of F.P.H.A. is now limited to assisting educational institutions only by certifying to W.A.A. that the institution is eligible to acquire buses and that the housing is within reasonable commuting distance. The institution must pay the cost of acquiring such transportation facilities.

SALARIES

Dallas, Tex., Raises Salaries

DALLAS, TEX.—On July 29 the people of Dallas voted to separate the schools from the city, establishing an independent school district. Two days later the board of education adopted new salary schedules according to which teachers' salaries are raised 33 1/3 per cent and principals' salaries, 30 per cent. Secretaries and clerks are receiving considerably more pay and all custodial employees' salaries have been raised.

Teachers with no degree will receive \$1800 the first year and an additional \$400 yearly until a maximum of \$3200 has been reached in fifteen years. Teachers with a bachelor's degree will start at \$2200 and go on to \$3700 in sixteen years, while those with a master's degree will receive a minimum of \$2300 and a maximum of \$4000 in eighteen years.

That Unsatisfactory Teacher

MISHAWAKA, IND.—City teachers will receive an average annual wage increase of more than \$600 each through a new salary schedule recently worked out, Supt. Harold E. Moore reports.

In addition to providing new levels of salary, which will take the median salary for teachers to approximately \$3500 with an average of \$3400, incentives for training and professional growth are included. Provisions have also been made in the interpretive rules and policies to deal with the occasional unsatisfactory teacher. The rules read:

"When it shall be unanimously agreed by the elementary principal, elementary supervisor and superintendent of schools in the case of elementary teachers and by the junior or senior high school principal, the superintendent of schools, (and the director or head of department when such a position exists) in the case of junior and senior high school teachers, respectively, that a teacher's work is unsatisfactory and/or inefficient and at the same time said administrative committee does not feel that dismissal is warranted because of the possibility of



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Buses that skid and slide on wet or icy roads . . . or when turning corners . . . are unsafe. So are those that lose traction in mud, muck, sand or snow. The same goes for school buses that stall at railroad crossings and at dangerous intersections.

A safety measure you can take to prevent possible mishaps is to prevent wheel-spin. And you can do this by having each of your buses equipped with a NoSPIN Differential—proved in more than 150,000 installations.

This famous automatic-locking differential gives full driving power to both rear wheels. When one wheel loses some traction, the remaining traction—plus all that of the opposite wheel—is available to move the bus. Both wheels must rotate when power is applied!

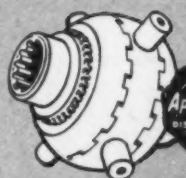
So give the children at your school this extra protection. Make sure your buses will be *safer* next fall. Have each of them equipped with a NoSPIN Differential this summer.

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improvement of said teacher, such a committee may recommend to the board of school trustees that such a teacher be classified as a "B" teacher for the ensuing school year and that the salary of said teacher shall be the state minimum salary to which his training and experience entitle him for the period of his contract. Provided, however, that no teacher shall be classified as such a "B" teacher for longer than one school year at a time and that such a classification be reviewed by the administrative committee and board annually, and said teacher notified of such classification prior to May 1. Provided further that not more than 5 per cent of the teaching staff may be so classified in any one school year."

AUDIO-VISUAL AIDS

New Text-Films Soon Available

NEW YORK CITY.—New text-films by McGraw-Hill Book Company, Inc., had their first showing July 29 before an audience of leading educators in the field of teacher training.

The films shown were part of a series based on "Student Teaching" by Dr. Raleigh Schorling, school of education, University of Michigan. They consist of five 16 mm. sound motion pictures and five silent follow-up film strips and are for pre-service and in-service teacher courses. They present classroom situations based on experiences of teachers.

Three other series to be available this fall are correlated with French's "Engineering Drawing"; French and Svensen's "Mechanical Drawing," and Diehl's "Textbook of Healthful Living."

Visual Aids Popular in Texas

AUSTIN, TEX.—The bureau of visual instruction of the University of Texas reports that last year more than 1000 schools asked for films and that 4200 films were shown 35,423 times in schools throughout the state. A total of 196 counties was served.

Visual Education Dealers Elect

Olson Anderson of Bay City, Mich., was elected president of the National Association of Visual Education Dealers at the recent convention of that organization in Chicago. Merriman H. Holtz, Portland, Ore., was elected first vice president; Hazel Calhoun, Atlanta, Ga., second vice president, and Mrs. Roa Kraft Birch, Milwaukee, secretary-treasurer.

Obtains Film Library

COVINGTON, KY.—The audio-visual education program of the parochial schools in this diocese is being extended through the recent purchase of a library of instructional sound films. The li-

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draperies and hangings made of
noncombustible Fiberglas* yarns for
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recreational rooms



Auditorium of Avalon Park School, Chicago. Noncombustible hangings, product of Thortel Fireproof Fabrics. Installation under supervision of Board of Education of the City of Chicago.

Safety depends on sound precautions . . . and every step that promotes safety in school design and equipment is an important step.

Serious fires usually result from the rapid spread of flames through materials that *can* burn.

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Decorative hangings woven of Fiberglas Yarns can't burn. They're *glass*. They're *originally* and *permanently* noncombustible. Furthermore, in the midst of fire or searing hot blasts, these fabrics of Fiberglas will not contribute to the further depletion of oxygen, will not give off suffocating smoke and fumes.

In hundreds of places of public assembly from coast to coast—in schools, auditoriums, libraries, churches, hospitals, hotels and restaurants—archi-

tects, decorators, officials and owners are designing for safety, including in their plans these practical, decorative, noncombustible fabrics of Fiberglas.

Many attractive weaves and colorful patterns are available—and expert fabric service shops located in principal cities are ready to assist in planning school needs—ready to fashion and hang the draperies selected. For information about these noncombustible fabrics, write Owens-Corning Fiberglas Corporation, Dept. 995, Toledo 1, Ohio. Branches in principal cities.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario.

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NEWS

brary will be located at Villa Madonna College at Covington, which will make the films and equipment available to the 22 high schools and 56 elementary schools in the northern and eastern Kentucky dioceses.

To aid in launching the program, the college conducted a summer course in audio-visual materials for Sisters from many of the schools. They were trained in the proper methods of using audio-visual materials and of integrating sound films with the curriculum.

Modern High Schools Visualized

WASHINGTON, D. C.—The use of audio-visual aids in high schools will revolutionize the construction of school buildings, according to John W. Studebaker, U. S. commissioner of education, in an article in the July issue of *School Life*.

"The classrooms in our future buildings," Dr. Studebaker states, "will not be chopped up into so many standard sized cubicles, each seating from 30

to 40 pupils. Instead, there will be several large classrooms similar to the present lecture rooms of our colleges and universities, accommodating 100, 200 or even more pupils. Such classrooms will have radio and sound equipment, with projection devices for educational films, film strips and pictures."

A skilled or "master teacher" will be in charge of the large classrooms. To maintain the necessary personal contact with pupils, Dr. Studebaker suggests that the "master teacher" may be aided by a junior teacher and an apprentice teacher who will instruct small groups or individuals in shops, laboratories and libraries.

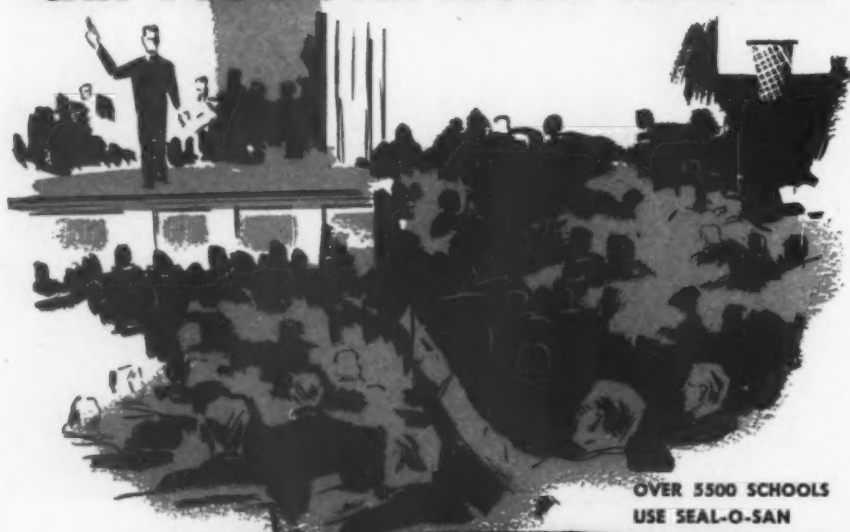
Film Council Trustees Meet

CHICAGO.—At the first meeting of the trustees of the Film Council of America early in August, Stephen M. Corey, head of the visual education center at the University of Chicago, was elected acting director of the board. Thurman White, on leave of absence as head of the department of visual education at the University of Oklahoma, was elected executive secretary and field director of the council. Mr. White will take office September 1 and will work toward the immediate goal of the organization, which is the establishment of 350 community film councils this year.

Have Largest Film Libraries

ELLENSBURG, WASH.—According to a survey made by Encyclopaedia Britannica Films Inc. of 182 colleges and universities, the two schools sharing the honor of having the largest film libraries possessed by any educational institution are Central Washington College of Education at Ellensburg and the State Teachers College at Millersville, Pa. Each has a total of 750 films. The survey found the largest collection of filmstrips in any college at the Washington school where the film library is under the direction of Dr. A. J. Foy Cross, director of visual education.

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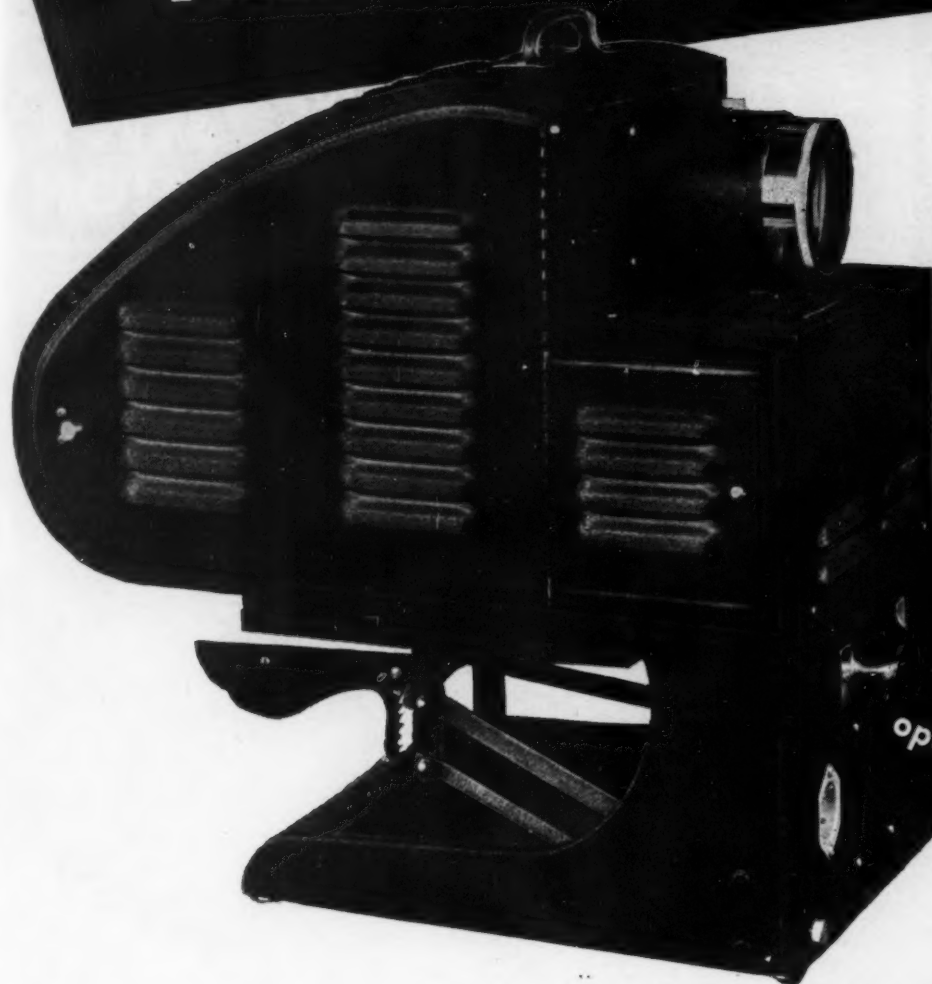
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MEETINGS

County Superintendents to Meet

WASHINGTON, D. C.—The second national conference of county superintendents is to be held at Indianapolis, September 22 to 24. Sponsored by the division of county and rural district superintendents of the department of rural education of the N.E.A., the conference will have as its theme "The Role of the County Superintendent in the Comprehensive School Program."

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The Beseler Model OA3 has met with enthusiastic response wherever it has been shown. Modern in design, compact and quiet, it delivers brilliant screen illumination, outstanding in an opaque projector. The Model OA3 accommodates an $8\frac{1}{2}'' \times 11''$ page, the actual projection area being $7\frac{1}{2}'' \times 10''$.

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Added features of the Model OA3 are self leveling platen with ratchet handle, permitting the use of both hands while inserting copy, and concealed elevating legs. Air cooling system assures adequate cooling of the two 500 watt medium prefocus lamps.

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Most convenient time _____
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School Food Service Meeting

DALLAS, TEX.—The theme of the School Food Service Association convention to be held in this city November 13-15 is "Health Education Through Food Service." Features of the program will be an address by Dr. Jennie S. Wilmot, associate professor of home economics at the University of Texas, on "How Texas Contributes to the National Food Basket"; trips to school lunchrooms and other food services and to the Dallas Health Museum; a symposium on the layout of kitchen equipment conducted by Mary DeGarmo Bryan, supervisor of food service and professor of home economics at Columbia University; an address by Dr. R. L. Johns, professor of school administration at the University of Florida, on "Recent Trends in Financing School Food Service Units."

Junior Colleges Discussed

LAKE FOREST, ILL.—At a workshop for editors held recently at Lake Forest College, Leonard V. Koos, director of research for the American Association of Junior Colleges, urged educational leaders to give early and serious thought to the problem of incorporating the junior college into the public school system. He warned against a tendency to tinker with existing systems by tacking on two years of college, saying that the best educational results could only be obtained where the entire vertical organization of the schools was realigned and integrated.

Studies have shown, said Mr. Koos, that the best realignment is the 6-4-4 system.

Approximately 100 persons representing educational journals in 39 states and five Canadian provinces attended the workshop, which is a part of the Rural Editorial Service sponsored by the University of Chicago and the Kellogg Foundation and under the direction of Francis S. Chase.

INSTRUCTION

Spanish Preferred

HARRISBURG, PA.—The number of pupils studying Spanish in Pennsylvania high schools has jumped 102 per cent in the last ten years. There has been a shift in the study of other foreign languages in schools, French decreasing 58 per cent, German 39 per cent and Italian 18 per cent. Ten years ago French was by far the most popular language.

Auto Group Offers Cars

WASHINGTON, D. C.—According to a statement of the American Automobile Association, schools prepared to give courses in how to drive can now obtain

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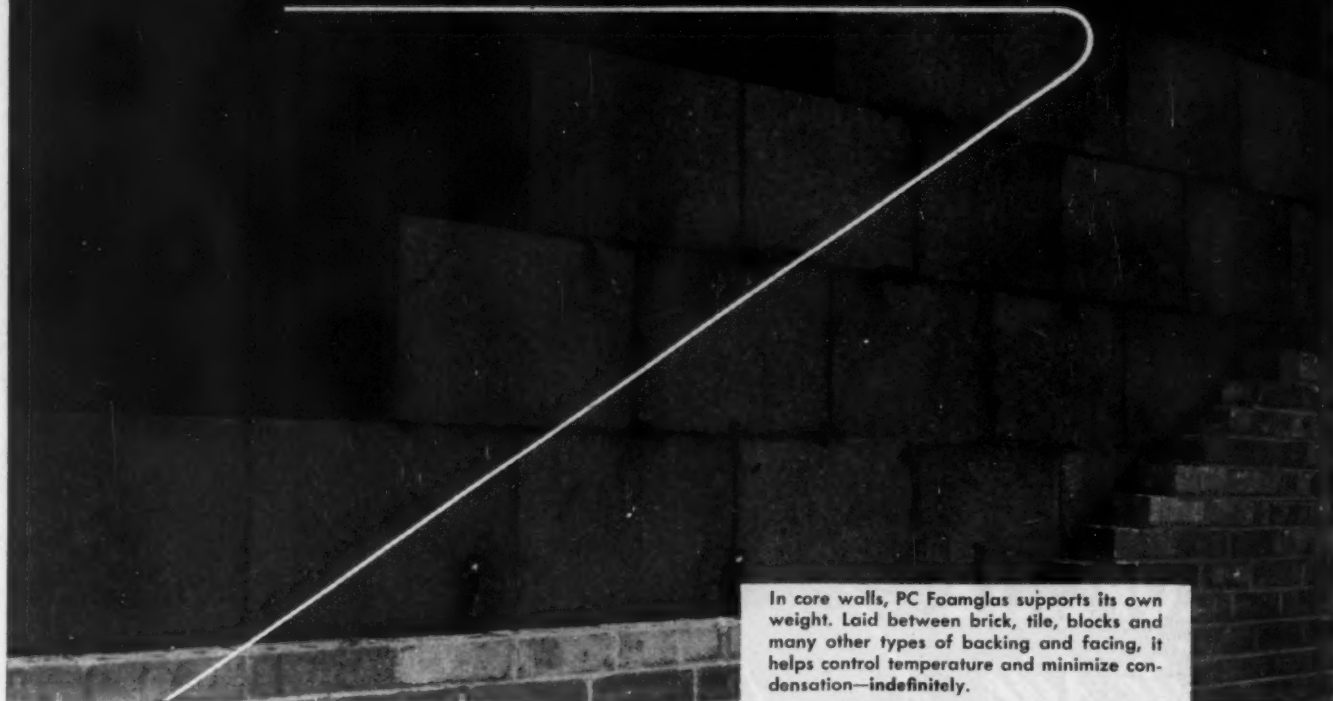
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Its unique cellular structure gives Foamglas excellent insulating properties. And since it is glass—and therefore impervious to many elements that usually damage or destroy other insulating materials — PC Foamglas retains its original insulating value *permanently*. That is why it is *better* than other insulating materials.

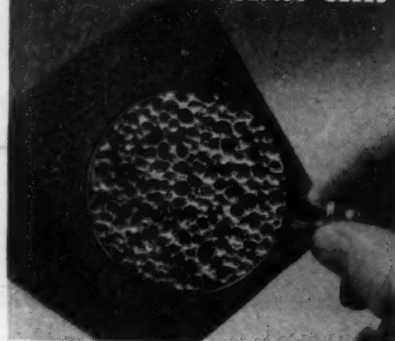
PC Foamglas has proved its ability to help maintain temperature levels, to minimize condensation, in structures of all kinds, without repairs or replacement due to failure of the material. First cost is last cost when you insulate with PC Foamglas — whether walls, floors, roofs or ceilings. When you insulate with Foamglas you insulate for good.

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NEWS

automobiles promptly and without charge. This is made possible through the cooperation of automobile manufacturers and dealers. Under the program, cars will be lent to schools without cost provided the schools have trained instructors and will use the cars at least ten hours every week.

Change in Rural Education

CHARLESTOWN, W. VA.—In an attempt to help pupils move easily into community life, a new program has been

formulated for some 80,000 youngsters in the one and two teacher rural schools in West Virginia. After two years of study by school authorities, it was decided to eliminate grades and to group pupils in units for study of practical subjects, such as dairying and agriculture. Elementary English, geography and other studies will be subordinated to and integrated with these. H. Cliff Hamilton, state supervisor of elementary education, says that this sort of training will better meet the actual needs of the children.

Classes to Neighborhood Theaters

NEW YORK CITY.—This city's 1,000,000 school children during the semester just closed attended a number of motion pictures in licensed neighborhood theaters during school hours.

The experimental program, first of its kind in the nation, was carried on with the license department and board of education, in cooperation with the theater owners, who charged no admission and underwrote the entire expense.

The children were accompanied by their regular classroom teachers and special details from the police, fire and license departments to ensure maximum safety.

Picture selections were made by the board of education. They included: "Adventures of Mark Twain," "Huckleberry Finn," "Tom Sawyer" and "The Prince and the Pauper." Each performance (from 9:30 to 11:30 a.m.) included an appropriate short subject and a pictorial representation of the pledge of allegiance to the flag of the United States.

New Speech Instruction Course

EVANSTON, ILL.—Under a new program begun at Northwestern University, a group of freshmen in the school of education is being given speech instruction to help eliminate the "dead pan" expression, nervous mannerisms, monotonous tone and indistinct pronunciation that bore pupils.

Instead of conventional courses, freshmen in the program take four units of study, including "Introduction to Personal and Professional Development." The spring quarter in this unit is devoted entirely to improving the student's speech habits and cultivating the speech skills essential to successful teaching. The other units are "Use of English," "The Bases of Social Life" and "Introduction to Science; Mathematics."

To Bolster National Security

WASHINGTON, D. C.—To strengthen national security through education, a new three point program emphasizing improved teaching of sciences, social studies and health will be undertaken by the U. S. Office of Education, according to Commissioner John W. Studebaker.

Selective service rejections made clear the importance of increasing health education and services in the schools. Statements by military authorities emphasize the vital need for bolstering basic instruction in the natural sciences and the seriousness and complexity of present world problems underscore the need for more effective programs in the social studies.

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FROM THE CRANE SCHOOL LINE:

Bright New Lavatories

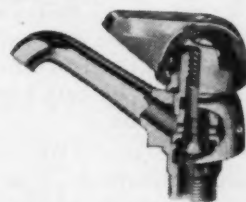
WITH FINGER-TIP *Dial-ese* CONTROLS

Straight from the new Crane line come these bright and sparkling Yorkshire Lavatories. Designed with an eye to beauty and an eye to durability, they're just the thing for hard, day-in-day-out school usage.

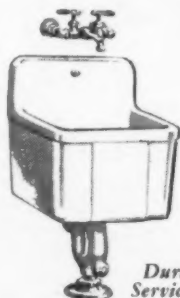
Like all Crane fixtures, these new lavatories have the extra something you expect from Crane... in this case, *Dial-ese*, the simplest, best-working controls ever devised. *Dial-ese* Con-

trols open and close at a finger's touch—even the smallest of fingers!

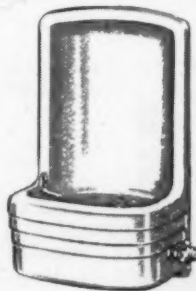
Crane designers have kept children of all ages in mind, so that grade, junior, and high schools alike will find every requirement in the new Crane line. It is still true that some fixtures come through faster than others, however, so check your needs early with your Crane Dealer, Crane Branch, or Wholesaler.



Dial-ese Controls are as easy to turn as a radio dial—yet they close tight against dripping. One standard Dial-ese unit is completely interchangeable on all lavatories in the broad Crane line.



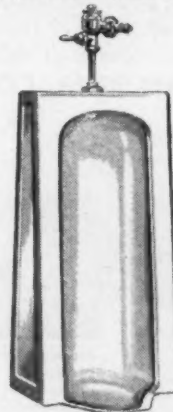
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Coming Events

American Association for the Advancement of Science, Chicago, December 26-31.
 American Education Fellowship, Stevens Hotel, Chicago, November 27-29.
 American Education Week, November 9-15.
 American School Health Association, Atlantic City, N. J., September 21-25.
 Arizona Education Association, Phoenix, November 6-8.
 Arkansas Education Association, Little Rock, November 6, 7.
 Association of School Business Officials, Grand Rapids, Mich., October 6-9.
 California Teachers Association, Biltmore Hotel, Los Angeles, December 5, 6.

Colorado Education Association, Denver, Pueblo, Grand Junction, Durango, October 23, 24.
 Connecticut State Teachers Association, Bridgeport, Hartford, New Haven, October 31.
 Georgia Education Association, Hotel Henry Grady, Atlanta, March 3-6, 1948.
 Idaho Education Association, Boise, April 23, 24, 1948.
 Indiana State Teachers Association, Hotel Lincoln, Indianapolis, October 23, 24.
 Iowa State Education Association, Des Moines, November 6-8.
 Kansas State Teachers Association, Topeka, Wichita, Salina, Independence, Hays, Dodge City, November 6, 7.
 Kentucky Education Association, Henry Clay Hotel, Louisville, April 14-16, 1948.

Maine Teachers Association, Hotel DeWitt, Lewiston, October 30, 31.
 Maryland State Teachers Association, Lord Baltimore Hotel, Baltimore, October 31, November 1.
 Michigan Education Association, regional conferences: region 1, Detroit, October 23, 24; region 2, Flint, October 16, 17; region 3, East Lansing, October 16, 17; region 4, Grand Rapids, October 23, 24; region 5, Traverse City, October 2, 3; region 6, Detroit, October 9, 10; region 7, Marquette, October 2, 3; region 8, Kalamazoo, October 9, 10.
 Minnesota Education Association, division conventions: central, St. Cloud, October 16, 17; northeast, Hibbing, October 9, 10; northern, Bemidji, October 9, 10; southeast, Rochester, October 23, 24; southwest, Mankato, October 17; western, Moorhead, October 16, 17; Twin Cities, Minneapolis, October 23, 24.
 Missouri State Teachers Association, Hotels Statler and Jefferson, St. Louis, November 12-14.
 Montana Education Association, district conventions: Miles City, Missoula, Glasgow, Great Falls, Dillon, October 23-25.
 National Association for Nursery Education, biennial conference, San Francisco, August 27-29.
 National Council of County Superintendents, Indianapolis, September 22-24.
 National Council on Schoolhouse Construction, Columbus, Ohio, October 10-13.
 Nebraska State Education Association, district association meetings: Lincoln, Omaha, Norfolk, Kearney, Holdrege, Alliance, October 23, 24.
 New Hampshire State Teachers Association, Hotel Carpenter, Manchester, October 15-17.
 New Jersey Education Association, Hotel Traymore, Atlantic City, November 6-9.
 New Mexico Education Association, Hilton Hotel, Albuquerque, October 22-25.
 New York State Teachers Association, Hotel Seneca, Rochester, November 24, 25.
 North Dakota Education Association, G. P. Hotel, Bismarck, October 22-24.
 Ohio Education Association, Hotel Deshler-Wallick, Columbus, December 29-31.
 Oklahoma Education Association, Tulsa, February 13, 14, 1948.
 Oregon Education Association, Portland, April 1-3, 1948.
 Pennsylvania State Education Association, Hotel Penn Harris, Harrisburg, December 29-31.
 School Food Service Association, Baker Hotel, Dallas, Tex., November 13-15.
 South Carolina Education Association, Columbia, March 18-19, 1948.
 South Dakota Education Association, district conventions: Yankton, Deadwood, Pierre, Watertown, November 24-26.
 Texas State Teachers Association, Hotel Gunter, San Antonio, November 27-29.
 Utah Education Association, Hotel Utah, Salt Lake City, October 9-11.
 Virginia Education Association, Hotel John Marshall, Richmond, October 16, 17.
 Washington Education Association, regional institutes: Tacoma, October 2; Seattle, October 3; Vancouver, October 6; Kelso, October 7; Aberdeen, October 8; Bremerton, October 9; Bellingham, October 10; Wenatchee, October 13; Yakima, October 14; Benton-Franklin area, October 15; Walla Walla, October 16; Spokane, October 17.
 West Virginia State Education Association, Hotel Prichard, Huntington, November 6-8.
 Wisconsin Education Association, Hotel Schroeder, Milwaukee, November 6-8.

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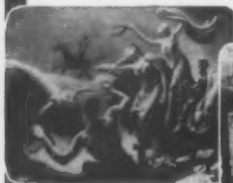
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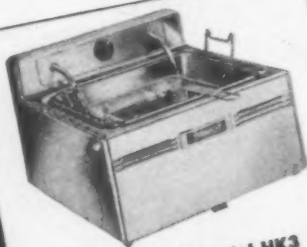
School

Address City

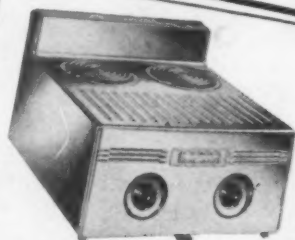
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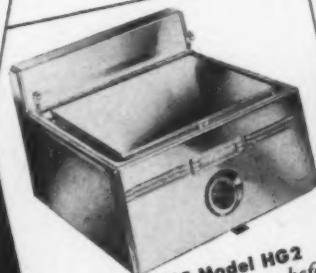
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1. FRY KETTLE Model HK3
Preheats to 350° in just 8 minutes. Production capacity up 72%. Exclusive lift-out fat compartment and swing-up heating unit eliminate the cleaning problem. Cuts fat consumption 25-50%. Only 15 lbs. of fat needed. Rated wattage: 4.5 kw.



2. HOTPLATE Model HH1
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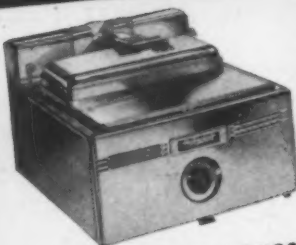


3. GRIDDLE Model HG2
Three times as fast as ever before. Depth-styling provides 212 sq. in. of usable frying area—with over-all width of less than 18 in. Cast-in Calrod® unit delivers uniform heat over entire griddle surface. Rated wattage: 3 kw.

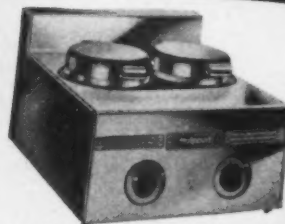


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4. GRIDDLE-GRILL Model HG3
Combines tremendous speed of grill with large frying area on griddle. Variable top and bottom temperature controls... permits combination dishes in one operation. Averages one order of bacon and eggs a minute. Rated wattage: 4.5 kw.



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Automatic waffles—signal lights indicate when to begin baking—and when to remove waffle. The patented shake-out handle eliminates sticking. Variable controls permit dialing LIGHT, MEDIUM or DARK waffles. Rated wattage: 1.65 kw.

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NEVER BEFORE has any manufacturer offered a complete line of *matched* counter appliances. Hotpoint — industry leader — is first again.

CUSTOM-MATCHED BEAUTY. All appliances in the new Hotpoint counter line are identical in size. All are finished in the same lustrous non-tarnishing chrome. Fitted together with accessory banking strips, the over-all appearance is that of a single, custom-built device.

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To Bolster National Security

(Continued From Page 90.)

In announcing program plans for 1947-48, Dr. Studebaker said: "Congress has allowed an increase in the 1948 appropriation for the Office of Education. This will enable the office to give greater assistance to the states and school systems in strengthening education for security."

To Allay Pupils' Curiosity

Classroom study of devices, such as crutches, hearing aids and artificial

limbs, was advocated by Howard A. Rusk, associate editor of the *New York Times*, to allay youthful curiosity on the subject and save the wearers of such devices embarrassment. Dr. Rusk spoke at a course for teachers sponsored by the *Times* and the board of education.

"With children of school age, curiosity (about prosthetic devices) is normal but if it can be satisfied within the classroom by giving the child an opportunity to see and examine these artificial aids the unknown becomes the familiar."

COMMUNITY RELATIONS

Applying Economics to Community

NEW YORK CITY.—When schools really try, they can improve community living standards, including food, shelter and clothing, and can add grace to living conditions generally. This was found through the Project in Applied Economics started eight years ago under a grant from the Alfred P. Sloan Foundation, Inc., by the universities of Vermont, Kentucky and Florida.

To diffuse the experience gained by the universities and by a number of other teacher educational institutions taking part in the project, a bi-monthly bulletin, *Applied Economics*, sponsored by the American Association of Teachers Colleges, is being published.

The bulletin is being sent without charge to school administrators, supervisors and faculty members of various colleges.

MISCELLANEOUS

Teachers Take Holiday Tours

WASHINGTON, D. C.—More than 450 teachers representing 40 states, Puerto Rico, Hawaii and Scotland participated in the summer tours conducted by the travel service of the National Education Association. The groups included teachers from kindergarten to university level, school nurses and librarians.

Sixteen trips were operated: six to Mexico; four to Cuba; one air tour to the West Indies, Cuba, Haiti, the Dominican Republic and Puerto Rico; four New England-Canada tours, and one tour of the eastern states. Carefully planned orientation discussions acquainted participants with the history and customs of the places visited.

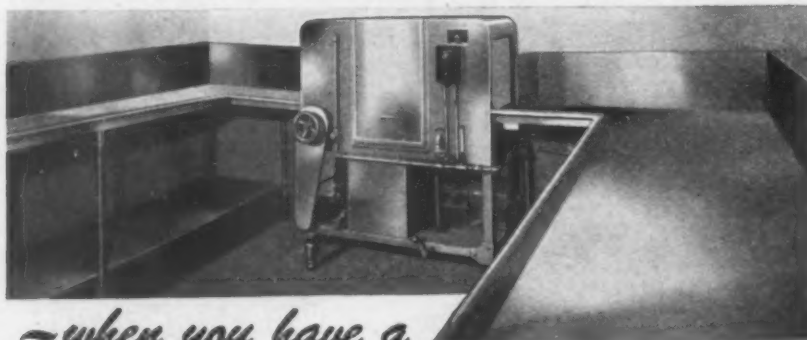
Superintendent's Bookshelf

HOME ROOM GUIDANCE. By Harry C. McKown. The McGraw-Hill Book Company, New York City. 1946. \$3.75.

ETIOLOGY OF ARTICULATORY SPEECH DEFECTS: A Comparison of the Incidence of Six Selected Factors in Children Having Articulatory Speech Defects With the Incidence of the Same Factors in Children Not Having Speech Defects. By Darrel J. Mase, Ph.D. Teachers College, Columbia University Contributions to Education, No. 921. Bureau of Publications, Teachers College, Columbia University, New York City. 1946. \$2.10.

JAPAN'S PROSPECTS. Edited by Douglas G. Haring. Harvard University Press, Cambridge 38, Mass. 1946. \$4.

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Lower labor cost, because the machine's carrier chain does the work of moving the racks through. All of the operators' time can be used in racking soiled dishes, and sliding away the clean china.

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IN THE complete Wyandotte line, there's a product especially made for each type of cleaning job you may have.

Wyandotte F-100*, for example, is the all-soluble cleaner for washing soiled painted surfaces and floors. It is harmless to paint and to the user's hands. F-100 is economical, too. A single tablespoonful in a gallon of water makes a paint-washing solution

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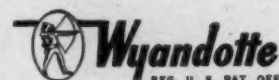
that does a *real* job, leaving surfaces bright and attractive. It is also highly recommended for dewaxing floors.

Self-polishing **Wyandotte Wax** is the water-resistant wax with anti-slip qualities. It's easy to apply . . . beautiful to look at . . . easy to clean. Regular applications of Wyandotte Wax will lengthen the life of any hard-surface flooring, painted, shellacked or varnished woodwork or cement floors.

For deodorizing mops and other equipment, after cleaning, you can count on **Wyandotte Steri-Chlor*** for safe, sure performance. It can be used either as a rinse or spray.

Your Wyandotte Representative will be glad to tell you more about these and other products in the Wyandotte line. His training and experience — backed by Wyandotte research — are yours for the asking.

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Funds for Textile Schools

The New England Textile Foundation has completed the first of four annual campaigns to raise \$250,000 a year, or a total of \$1,000,000, to assist New England textile schools and to grant scholarships to deserving students who wish to attend them.

The schools are Lowell Textile Institute at Lowell, Mass., the Textile School of the Rhode Island School of Design at Providence, R. I., the Bradford-Durfee Technical Institute at Fall

River, Mass., and the New Bedford Textile Institute at New Bedford, Mass. The N.E.T.F. fund, principal as well as interest, will be used to increase teachers' salaries at these schools so as to attract the best available teachers, to modernize or replace antiquated or inadequate school equipment and facilities and to grant as many scholarships as possible.

Lincoln Papers Draw Crowds

WASHINGTON, D. C.—Teachers and pupils are flocking to the Library of

Congress to examine the private papers of Abraham Lincoln made available to the public for the first time July 26, 1947.

A complete microfilm, nearly 2 miles in length, reproducing all of the papers is available through the Library of Congress at a cost of \$645. An index to the documents can be purchased for \$32.

Possible Contact for Teachers

WASHINGTON, D. C.—R. Adm. C. E. Coney, executive director of the U. S. Naval Academy alumni association, has announced the expansion of the alumni association employment service making it available to the more than 300,000 eligible commissioned officers of the United States Navy.

Adm. Coney pointed out that many former regular naval officers are qualified as teachers, primarily in engineering and scientific subjects, and that many of them are interested in entering or returning to educational work.

The purpose of this expanded service is to establish a clearinghouse for employers desiring the services of specially qualified personnel and for ex-naval officers seeking suitable placement. Headquarters address is: U. S. Naval Academy Alumni Association Employment Service, Suite 801, 1507 M Street, N.W., Washington 5, D. C.

Board for Student Exchange

WASHINGTON, D. C.—President Truman has appointed a 10 member board of foreign scholarships to select American students to study abroad under funds accruing from the sale of surplus property abroad as authorized by the Fulbright Act.

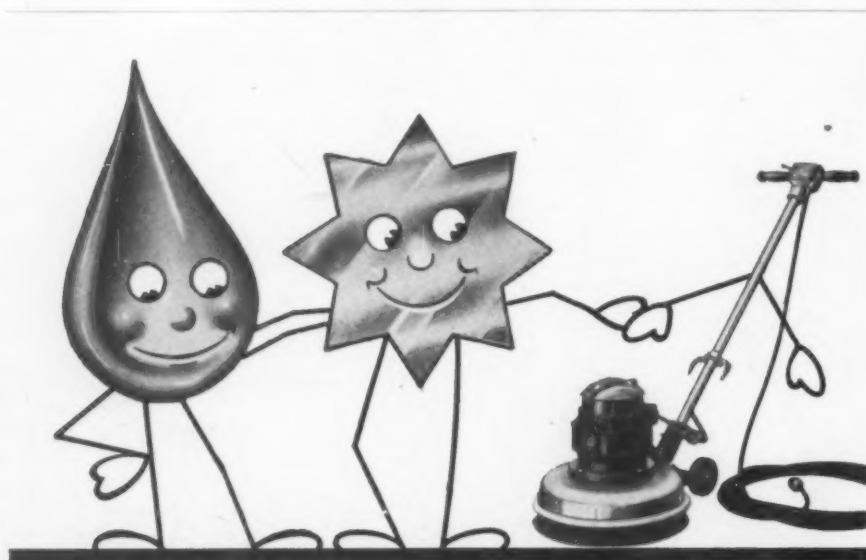
The appointees are: Gen. Omar N. Bradley, commissioner; John W. Studebaker, Francis Spaulding, Helen C. White, Laurence Duggan, Ernest O. Lawrence, Sarah Blanding, Walter Johnson, Charles S. Johnson and Martin P. McGuire.

American Composers Encouraged

WASHINGTON, D. C.—A pamphlet recently issued by the National Symphony Orchestra Association, containing a list of 149 premières performed by the orchestra in the years 1941 through 1947, reveals that 53 per cent of the musical scores were by American composers. The large number of new compositions refutes the statement that composition is languishing in America. That audiences appreciate such endeavors is clear indication that creative art is still enjoyed.

Friendship Packages for Abroad

NEW YORK.—The morale of teachers in Europe and Asia is being bolstered through the efforts of Teachers Good



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Briten-All is a scientifically prepared cleaner that cleans floors . . . all floors . . . more efficiently because it penetrates into the pores and removes dirt and grime . . . does it quicker,

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The scientifically prepared waterproof heavy duty floor finish that dries to a bright, uniform lustre, without polishing. VESTA-GLOSS is the one floor finish

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Team-up with these three floor protecting partners for safe, beautiful, "easy-did-it" floors!

easier and safer than any other method. And it's more economical too—more gallons of more efficient cleaning solution per ounce. Try it.

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1. Protection. 2. Wear Resistance. 3. Water Resistance. 4. Slip Resistance. 5. Lustre. 6. Self Leveling. Approved by flooring manufacturers and leading architects.

the same time lower your cost. It scrubs and polishes faster. Sturdy, perfectly balanced construction assures quietness and ease of operation. Vestal's automatic handle switch assures safety from hazards.

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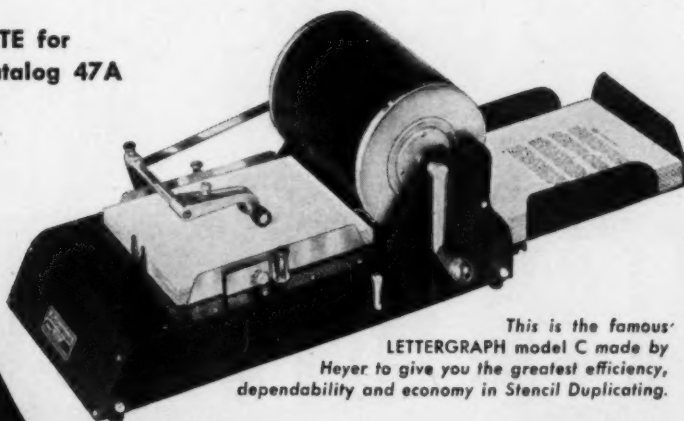
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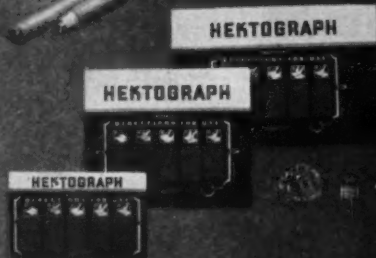
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NEWS

Will Service of the World Education Service Council, Inc. Organized by teachers for teachers, friendship packages, letters and reports are being sent abroad.

Friendship packages are sent by individuals or by organizations. The Teachers Good Will Service, 2 West Forty-Fifth Street, New York 19, N. Y., will ship a specially selected package for \$5. With the donation, a friendship letter is sent. A package can be earmarked for any one of the liberated countries, if desired.

Packages prepared individually should weigh no more than 10 pounds. They should contain items like clothing, books, writing material, sewing kits, smoking articles or games. Food (coffee, tea, cocoa, rice, dehydrated foods) should be packed separately. A friendship letter is attached to each package with a notation on the outside as to whether it is for a man or woman.

Labels for shipping can be obtained by writing to the office of the Teachers Good Will Service; for each label \$1 must be included to defray expenses of

crating and shipping of the packages.

Packages must be sent *only* to: Teachers Good Will Service Warehouse, 35 East Thirty-Fifth Street, New York 16, N. Y.

Exchange of Professional Personnel

WASHINGTON, D. C.—Plans have been announced by the State, War and Navy departments for an exchange of professional persons in the fields of education, religion and information between the United States and Germany. Persons wishing to go to Germany to assist in rehabilitation in these fields must be recommended for the project by a recognized institution or agency and the plan must be approved by the State Department, the War Department and the U. S. Military Government in Germany. Institutions are also requested to assist in financing and providing accommodations for qualified Germans to study in the United States.

Individuals or institutions interested in this significant program may obtain further information from the Civil Affairs Division, War Department, Washington 25, D. C.

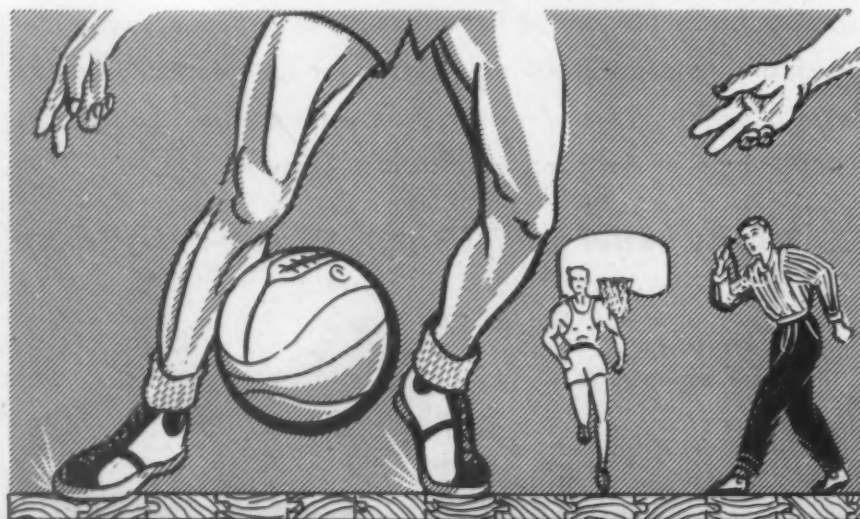
Building Program Postponed

UNIVERSITY CITY, Mo.—In 1944-45 this city mapped out a new building program for its school system and the bond issue for \$1,200,000 was approved. The program called for a new elementary school, an addition to two schools, remodeling of, and an addition to, the Junior High School and repairs and decoration for each of the schools in the system.

During the summer of 1946 repairs were made and decorating was done at all schools except the Ward Junior High School and several playgrounds were partially surfaced. Because of the difficulty of getting materials and the fact that building costs are up as much as 50 per cent, it would cost considerably more than \$1,500,000 and many months of time to complete the remainder of the building program. The architect for the school system, therefore, advised that building be postponed for at least another year. Only the needed repairs and redecoration at the junior high school have been done this summer.

Education Writers Organize

CINCINNATI, OHIO.—An organization known as the Education Writers Association made up of newspaper editors and writers specializing in the field of education reporting was organized here during the N.E.A. convention. Its charter membership is drawn from the press and from magazines of general circulation having on their staffs men and



GYMLOH

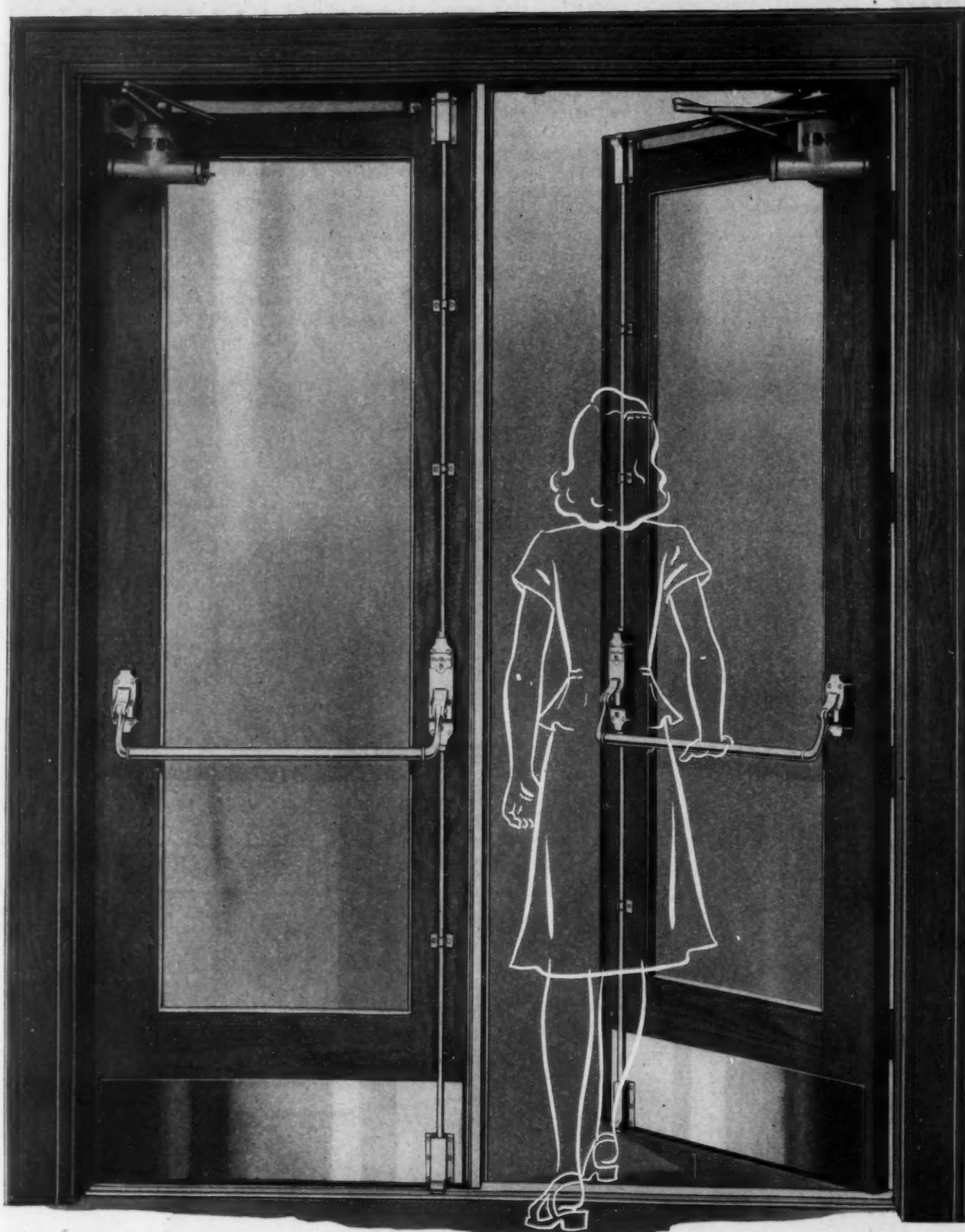
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NEWS

women assigned to report on education.

The following officers were elected: Benjamin Fine, *New York Times*, president; George J. Barmann, *Cleveland Plain Dealer*, vice president; Millicent Taylor, *Christian Science Monitor*, secretary-treasurer.

Book Week in November

Book Week will be observed by schools, libraries and civic groups throughout the country from November 16 to 22 for the twenty-eighth year. Its sponsors have suggested as a special

project for this year the sending of Treasure Chests of children's books, similar to those which have been sent abroad during the last three years, to areas in the United States where children have no access to books other than lesson books. The Save the Children Federation is cooperating to make Treasure Chests available to these children. Inquiries addressed to this organization at 1 Madison Avenue, New York 10, N. Y., will bring instructions concerning participation in the campaign which opens October 1.

A folder describing various Book Week aids, such as picture maps and display materials, can be obtained from R. R. Bowker Company, 62 West Forty-Fifth Street, New York 19, N. Y.

For Parent-Teacher Leaders

CHICAGO.—A grant of \$25,000 was made to Northwestern University from the National Congress of Parents and Teachers for a three year program in parent-teacher leadership beginning in September. It will be administered by a joint committee composed of Mrs. L. W. Hughes, president of the national congress, with several members of her board, and J. Monroe Hughes, dean of the school of education, assisted by members of his faculty.

The program will be a part of the curriculum of the school of education. Its aim is to familiarize students of education with the organization of the home-school movement and will train teachers in the technics of effective home-school relations.

It will reach primarily persons in colleges, universities and teacher training institutions who are engaged in the curriculum field or in the instruction of teachers and will be offered to school executives and supervisors, classroom and special teachers also.

It is intended eventually to set up workshops at Northwestern in which leaders from local P.-T.A. groups may take intensive training in technics of parent-teacher relationships.



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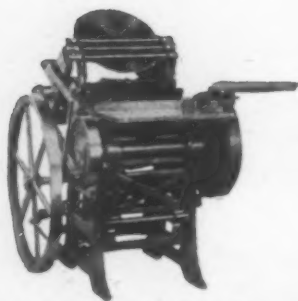
FACTS about the PRINTING INDUSTRY FOR SCHOOLS with Guidance Addendum

LOOKS... PLUS (How type is made at ATF)

GENERAL SHOP SPECIFICATIONS

IDEA FILE (Reproductions of school printing projects)

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PUBLICATIONS

Human Relations a Challenge to Our Public Schools. A compilation by Frank E. Karelsen Jr. of the opinions of 123 leading educators, sociologists, religious leaders and others as to how the school and teacher may better serve in improving race and human relations. New York 17, N. Y.: Frank E. Karelsen Jr., 280 Park Avenue.

Health Interests of Children. A report of a research study of health interests and needs of children as a basis for health instruction for pupils in kindergarten through grade 12. Denver 2, Colo.: Department of Instruction, Denver Public Schools. \$1.25.

American History and Economics in the High School Curriculum. A suggestive guide for teachers of social studies. Curriculum Bulletin No. 6, 1946-47. Brooklyn 2, N. Y.: Board of Education of the City of New York, 110 Livingston Street.

Employment Outlook in Machine Shop Occupations. One of a series of occupational studies for use in vocational counseling of veterans and young people in schools prepared by Richard H. Lewis and Calman R. Winegarden with Abraham Ringel, of the Bureau of Labor Statistics, U. S. Department of Labor. Washington 25, D. C.: Superintendent of Documents, U. S. Government Printing Office. 20 cents.

Seven Rules of Clear Thinking. By Roy C. Bryan. A unit of study for high school pupils based on the thesis that "the greatest single obstacle to clear thinking is the tendency of

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people to believe only those things they want to believe." Kalamazoo, Mich.: Western State High School.

Handicaps Due to Limitation of High School Teaching Personnel and How They Are Being Met. Research Study No. 1 of the Texas Study of Secondary Education based on questionnaires sent to high schools. Austin, Tex.: University of Texas, 217 Sutton Hall. 50 cents.

The First Five Years of the Texas Study of Secondary Education 1942-47. By Elenora Albrecht. Research Study No. 5 of the Texas Study of Secondary Education. The title is self descriptive. Austin, Tex.: University of Texas, 217 Sutton Hall. 50 cents.

High School Was Like This. An illustrated booklet telling in story form what the current program is like in Booker T. Washington High School at Rocky Mount, N. C., developed by the faculty in cooperation with the Secondary School Study of the Association of Colleges and Second-

ary Schools for Negroes. Rocky Mount, N. C.: Booker T. Washington High School.

Manual for the Preparation of Term Reports for High School Students. By N. William Newsom and John H. Pendergrast. A booklet containing information on how to select a topic for a term report, how to locate source materials and analyze them, how to outline materials, how to organize them and how to write the report acceptably. Denver 14, Colo.: Sage Books, Inc., 1716 View Point Road. 65 cents.

The School Board and the School Board Member. By J. W. Diefendorf. A handbook setting forth the duties and responsibilities of board members and their proper relation to school personnel. Albuquerque, N. M.: Division of Research, Department of Government, University of New Mexico.

Social Travel: a Technique in Intercultural Education. By Edward G. Olsen. First pamphlet in a new series published jointly by the

Bureau for Intercultural Education and the American Education Fellowship. It describes field trips of young people and adults seeking an understanding of "different" cultural groups. New York 19, N. Y.: Bureau for Intercultural Education, 1697 Broadway. 35 cents; discount of 20 per cent per hundred.

The Struggle for Atomic Control. By William T. R. Fox. An analysis of a possible basis for compromise, showing that a way can be found for agreement on atomic control if the will exists on both sides, together with a factual history of the negotiations that have thus far taken place. Pamphlet No. 129. New York 16, N. Y.: Public Affairs Committee, Inc., 22 East Thirty-Eighth Street. 20 cents.

Democracy's Case Against Religious Education on School Time. By Gerald F. Weary. Reprinted from the *Journal of Liberal Religion*. A pamphlet arguing that released time religious education will take democracy out of the schools and answering the arguments of the plan's advocates. Boston 8, Mass.: The Beacon Press, 25 Beacon Street. 25 cents.

Handbook for Utah School Board Members. Prepared by Roald F. Campbell. Salt Lake City, Utah: Utah State School Board Association, Capitol Building.

Names in the News

(Continued From Page 48.)

Carter succeeds Dr. Cecil L. Rice who resigned to become superintendent at Coatesville, Pa.

Robert Hamilton Ballagh, principal of Louisa County High School in Virginia, has been named principal of the high school at Farmville, Va.

George Howden, principal of the Selma Union High School, Selma, Calif., is retiring after seventeen years in that capacity and twenty-eight years in the school district. Arthur C. Timothy will succeed him, having resigned as principal of the Bret Harte Union High School at Angels Camp, Calaveras County, California.

Edwin H. Miner of Fairfield, Vt., has been appointed associate U. S. commissioner of education after establishing a distinguished record of service in the U. S. Army education program. He was previously superintendent at Wellesley, Mass.

Burris E. Claypool, vice principal of the high school at Arcata, Calif., has been made principal of the Anderson High School in Shasta County, California.

Walter A. Hitchcock has been elected principal of the high school at Wilbur, Wash., succeeding Wallace Bannon, resigned.

G. Howard Gould has left his position as principal of the Central School at Odessa, N. Y., to become director of public relations of the State Teachers Association.

Arthur George Andresen has accepted an appointment as principal of the high school at Canoga Park, Calif. His most recent post was vice principal at Emerson Junior High School in Los Angeles.

Lloyd Ashby, principal of the senior

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Model B...30x40	10.00	10.00	NONE
Challenger...37x50	30.00 (39x53)	22.00	DOWN 26%
Model B...37x50	12.50 (36x48)	14.00	UP 12%
Challenger...45x60	45.00	30.00	DOWN 33 1/3%
Model B...45x60	22.50	20.00	DOWN 11%

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high school at Moline, Ill., has resigned to become head of the Technical High School, Omaha, Neb. **Gerald W. Smith**, assistant principal, will succeed him.

Laura L. Wood is the newly appointed director of the Bergen School, Jersey City, N. J. Since the end of the war, she has been serving as academic dean of Ogontz Junior College at Rydal, Pa.

John W. Headley, president of North Dakota Teachers College at Mayville, will become president of State Teachers College at St. Cloud, Minn., beginning September 1, succeeding **D. S. Brainard** who has been acting president.

Henry J. Stubba, acting principal of Woodrow Wilson Junior High School, Passaic, N. J., for three years, has been advanced to the principalship.

C. Edward Yandon, principal of Black River High School, Black River, N. Y., has been elected district superintendent in the first supervisory district of Essex County. **Nelson Burton** of Felts Mills, N. Y., will be the new principal at Black River.

L. L. Lammert, principal of the Woodbury High School, Woodbury, N. J., has retired. He is being succeeded by **John R. Worral**, principal of the North Huntington High School at Irwin, Pa.

Oscar L. Alm, principal of the Custer County High School, Miles City, Mont., has resigned to become director of teachers' training at the State Teachers College at Minot, N. D. He will be succeeded by **E. D. Wagner**, teacher at the state normal school at Dillon.

Mrs. John Foy, principal of North Main Street Grammar School, and **Hattie Atkins**, principal of Rockford Street Grammar School, both at Mount Airy, N. C., have resigned after many years of teaching. **Ruth Minnick** will be the new principal of the former school and **Grace Foy**, principal of the latter.

Howard W. Hazeltine, former principal of Fremont Elementary School at San Luis Obispo, Calif., has accepted the principalship of the new San Lorenzo Union School District.

The Rev. Michael J. Costello, French instructor at Regis High School, New York City, has been made principal of Canisius High School in Buffalo, N. Y., succeeding **Rev. Lorenzo K. Reed** who was recently named director of secondary Schools in the Society of Jesus, New York Province, and director of special studies.

Harry W. Coleman, principal of Benjamin Franklin High School, Carbon-dale, Pa., has retired after thirty-seven years in the school field.

Paul Rinset, head of the agriculture department of the Sonoma High School, Sonoma, Calif., has accepted the principalship of the high school at Laytonville, Calif.

E. J. Barker, vice principal of Columbia High School at Richland, Wash., has been named principal.

Harold H. Threlkeld, principal of Senior High School at Grand Island, Neb., has been elected principal of the Colorado Springs Senior High School, Colorado Springs, Colo.

William J. Kircher, for nearly twenty years principal of La Cumbre Junior High School, Santa Barbara, Calif., has been made principal of Santa Barbara Junior College and assistant director of the Community Institute. **George E. Browne**, principal at Harding School, was moved up to the principalship of La Cumbre and **Claude Hardesty**, principal at McKinley, is taking over Mr. Browne's former position. **Dixon MacQuiddy** has been made principal of Garfield School and **Esther Mickelson**, present principal there, has been named assistant director of instruction.

C. U. Williams, principal at Dabney, N. C., has resigned and will be succeeded by **G. J. Earp** who comes from the Hurdle Mills School in Person County. **W. R. Whittenton**, high school principal at Aycock, N. C., and **Eleanor Hutchinson**, principal at Townsville, have resigned, but their successors have not been named.

Carl C. Carnal, vice principal of the high school at Ludlowville, N. Y., has been made principal. **Vivian Peckham** has returned to the principalship of Gilboa Central School, Gilboa, N. Y., after six years in the army. **A. L. Perry**, formerly of Beaver Falls, N. Y., is now principal at Holley, N. Y. **George H. Purple**, principal at Edmeston, N. Y., for twelve years, has gone to Beaver Falls as principal of the Beaver River Central School. **Harry Rude**, principal at Central Islip, N. Y., is the new principal at Troupsburg. **E. J. Alvut**, principal at Pine Plains, N. Y., has become principal at Marlborough, N. Y., and will be succeeded by **F. W. Stanton** of Schuylerville.

Richard Byers, teacher in the Hartford High School, White River Junction, Vt., has been appointed principal of the high school at Danville, Vt. He will succeed **Philip Manning** who has accepted the principalship at Brigham Academy, Bakersfield, Vt.

John E. Brown, assistant high school principal at Bedford, Ohio, has been made principal of the high school at Lancaster, Ohio.

B. F. Stevens, superintendent at Lakota, N. D., has resigned to become principal of the senior high school at Devils Lake, N. D.

William J. Wall has been appointed principal of the Eleanor Van Gelder School at Edgewater, N. J., succeeding **Ella M. Weston** who has retired.

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Lower brightness ratios, better daylight distribution, designed into new Oakdale Christian School, Grand Rapids, Michigan, by architect James K. Haveman

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room is kept within a ratio of about 5 to 1 under illumination of sky only and about 3 to 1 under direct sun. This is extraordinary illumination!

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The same kind of information shown in the diagram at right for the Oakdale Christian School is now available for any school designed with this fenestration. Task brightnesses for any location in the room can be determined while the school is still in the design stage, for any time of day and for any latitude in the United States for either of three significant dates, the equinoxes or the winter and summer solstices. This is new information published for the first time. This convenient manual will be helpful in any school planning, even in building-orientation and in arrangement of class schedules.

It answers a multitude of questions on interior brightness and brightness contrasts; it publishes recommendations for interior reflectivities and gives information on the brightnesses that will be obtained with these reflectivities. Use the coupon or write for your copy today. Available to architects, teachers and school officials without charge. Owens-Illinois Glass Company, Insulux Products Division, Toledo 1, Ohio.



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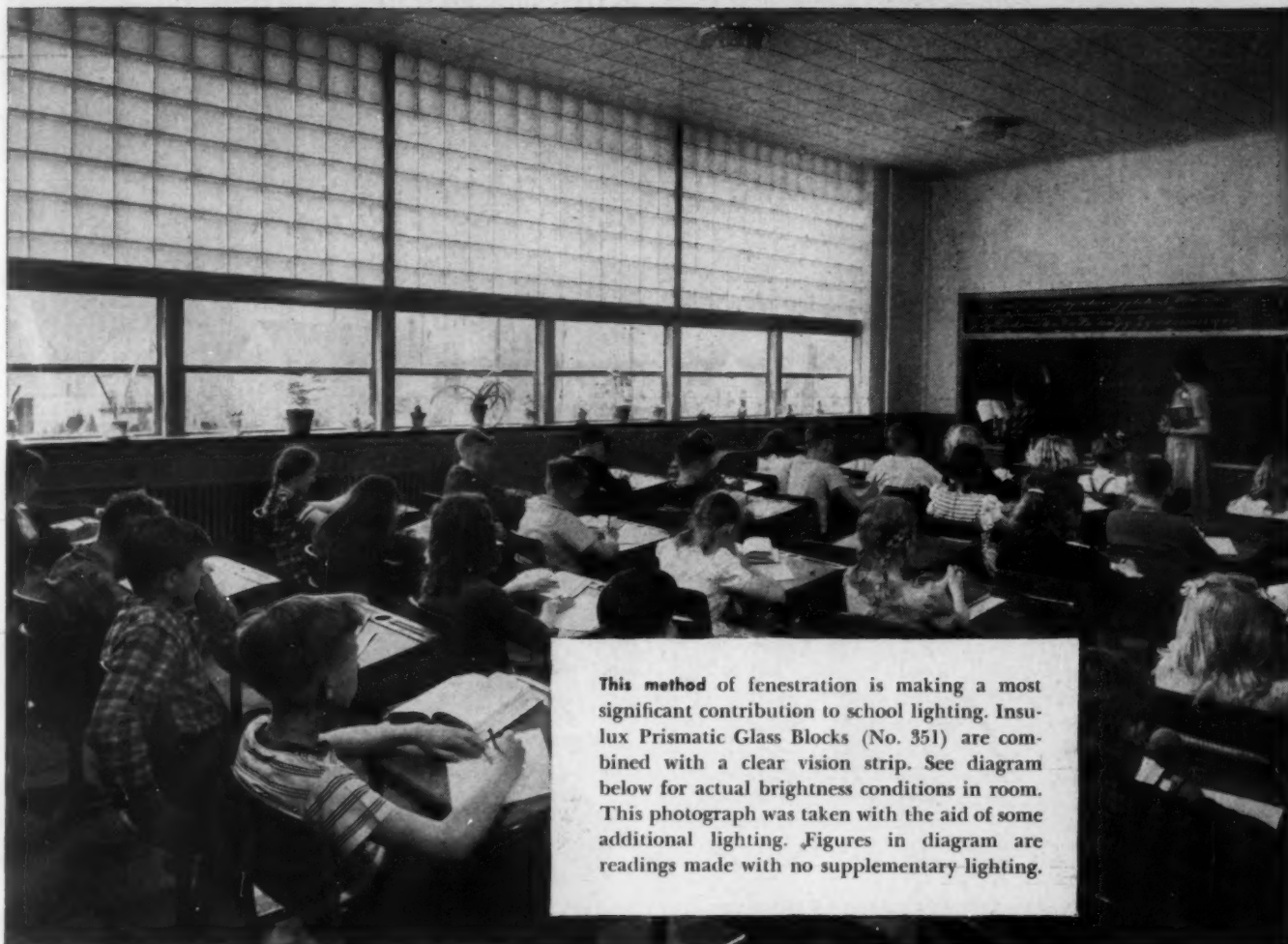
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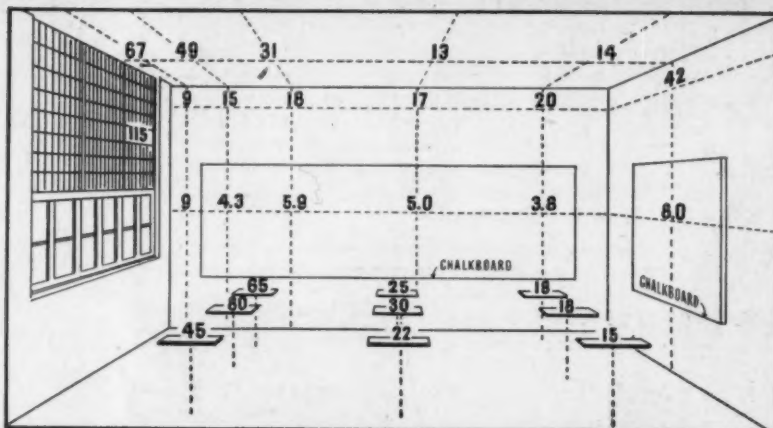
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This method of fenestration is making a most significant contribution to school lighting. Insulux Prismatic Glass Blocks (No. 351) are combined with a clear vision strip. See diagram below for actual brightness conditions in room. This photograph was taken with the aid of some additional lighting. Figures in diagram are readings made with no supplementary lighting.



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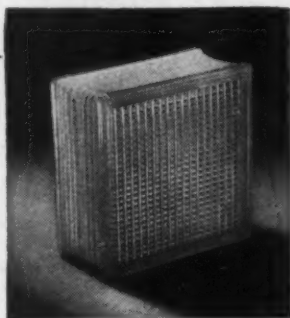


This diagram shows brightness readings for the classroom pictured above. The room faces west; readings were taken between 8:35 and 9:16 a.m. on July 9, 1947. Vertical surface exterior illumination varied from 900 to 1,040 foot-candles with an average of 980. All brightness readings were taken as the product of illumination and average reflectivity. They were checked with a Luckiesh-Taylor Brightness meter, which in all instances gave somewhat higher readings—especially on the chalkboard. Brightnesses at desk levels are for a task of 70 per cent reflectivity. All readings above are in foot-lamberts. All readings and computations were made by Dr. R. A. Boyd of the University of Michigan. Reflectivities were as follows:

Ceiling—Cream, 72 per cent; Walls—Cream, 76 per cent; Dado—Reddish Brown, 30 per cent; Desks—Natural Finish, 15 per cent; Woodwork—Natural Finish, 45 per cent; Lockers—Brown, 12 per cent; Corkboard, 30 per cent; Blackboard, 11 per cent; Floor—Average, 19 per cent.

Note especially that these readings were taken for a west room early in the morning. Other readings were taken for early afternoon and late afternoon. They were of course much higher.

Insulux prismatic block No. 351 has been developed for accurate daylight control. The pattern, utilizing the four faces of the block, turns light upward. The ceiling acts as a huge reflector to re-direct light downward.



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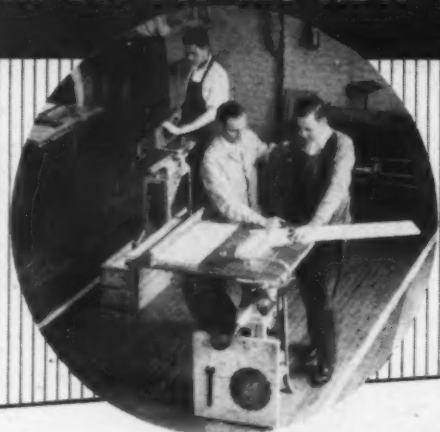
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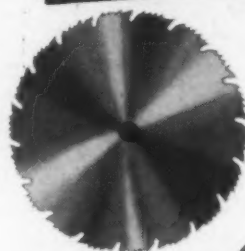
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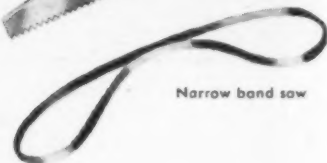
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Close-up of new swing-out gate, showing gate in open position

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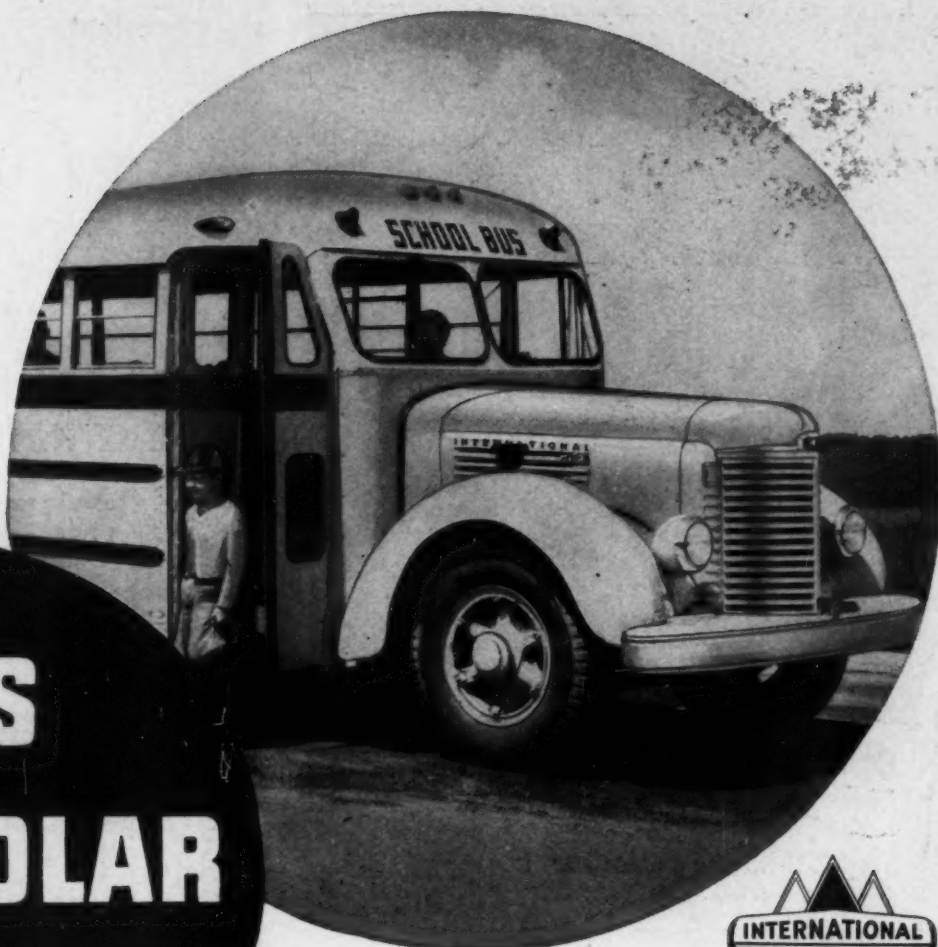
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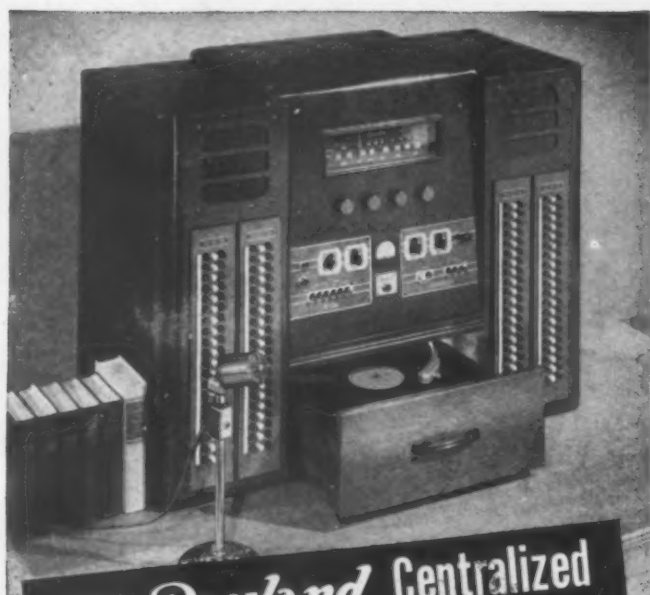


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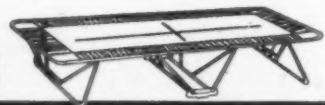
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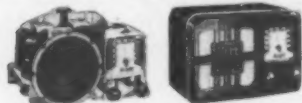
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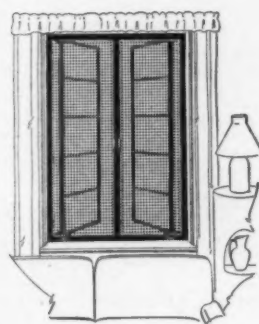
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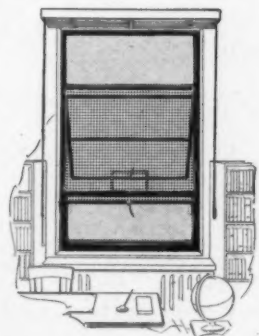
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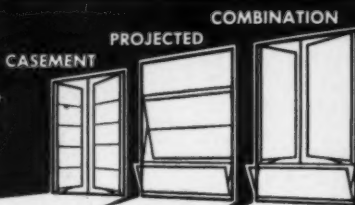
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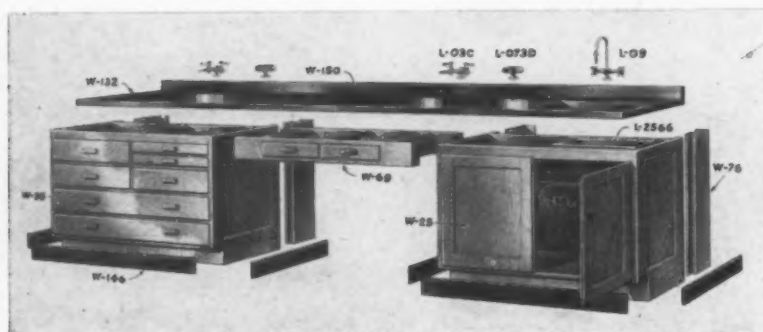
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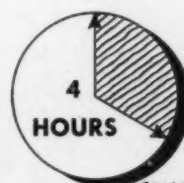
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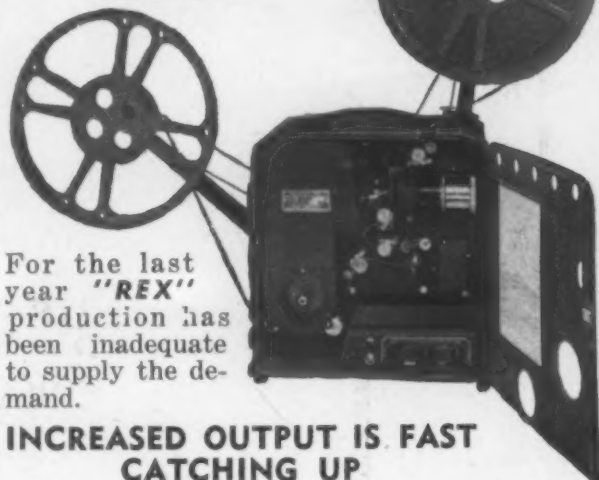
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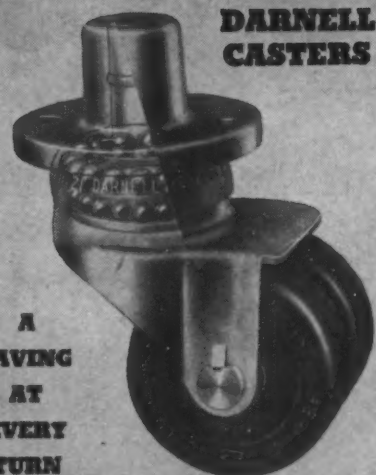
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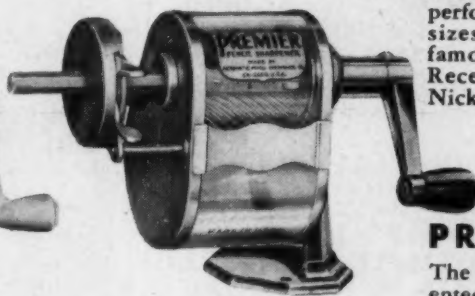
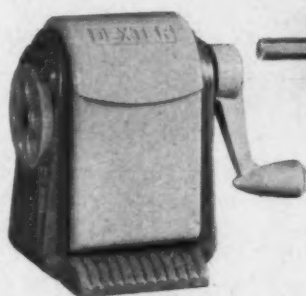
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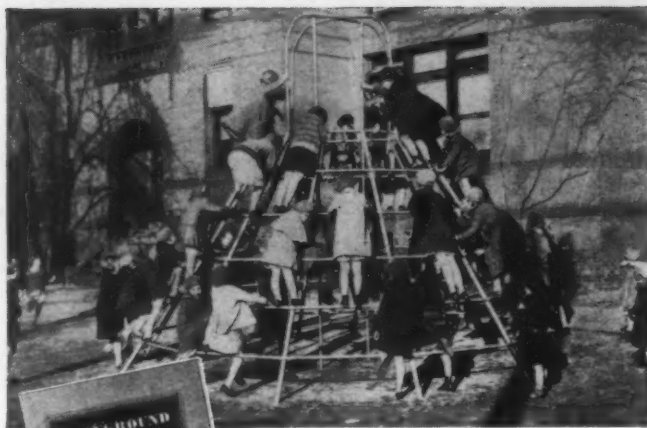
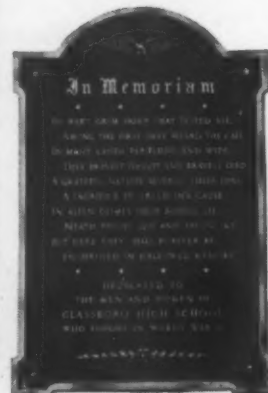
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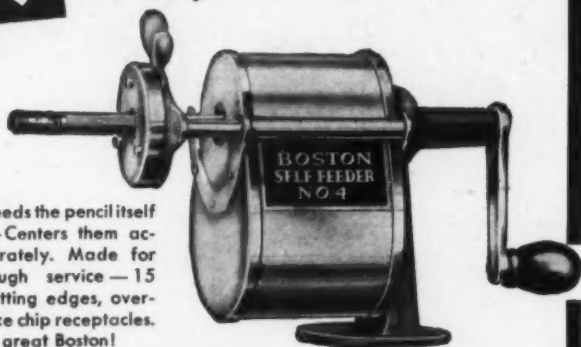
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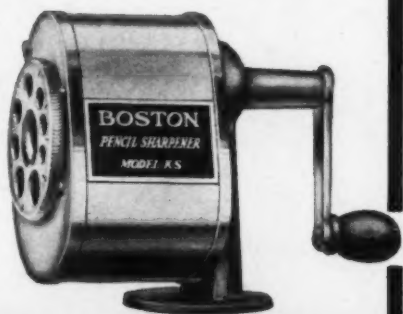
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3

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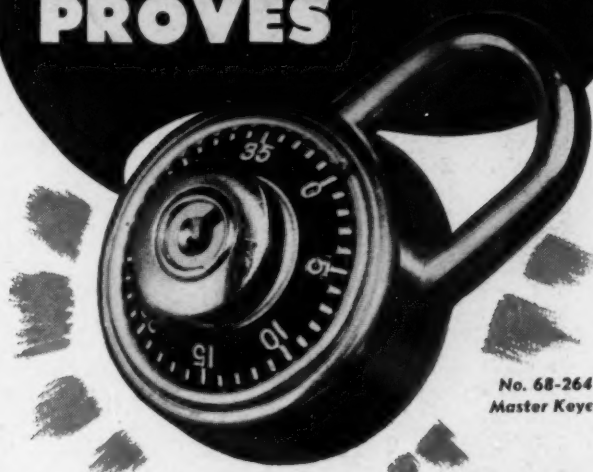
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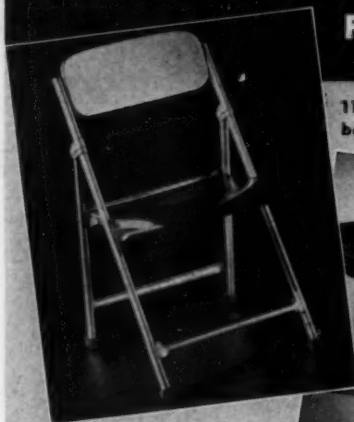
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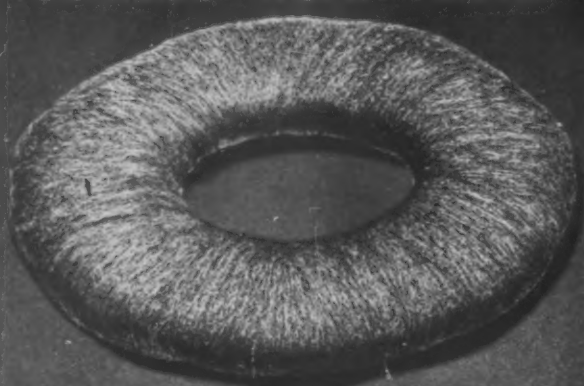
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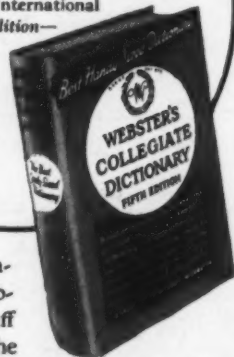
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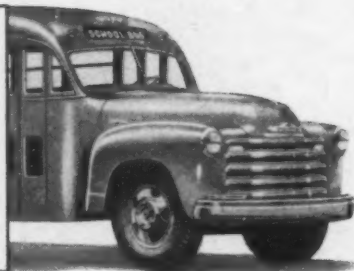
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maximum pulling power (torque), and consume the least fuel per unit of work performed, at engine speeds well *under* their governed r.p.m. in school bus operation. Full loads are carried, and hills are climbed, with the same ease as without a speed-limiting governor.

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161- and 199-inch wheelbases. Gross vehicle weights, 10,500 to 15,000 pounds. Pupil capacities, 30 to 54. Hydrovac power braking standard equipment on 199-inch chassis, obtainable at extra cost on 161-inch chassis.

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 2, MICHIGAN

What's New **FOR SCHOOLS**

SEPTEMBER 1947

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 136. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your request to the manufacturer. If you wish other product information, just write us and we shall make every effort to supply it.

Clarke DUO Sander and Polisher



The Clarke DUO Sander and Polisher is a portable electric device which is light enough for one hand operation, yet powerful enough to perform all types of sanding, polishing, buffing and other rotary operations on a 5 inch disc. It will prove of value in the maintenance of furniture and equipment and also in school shop classes.

The trigger switch and pistol handle make it easy to operate and control the new unit with one hand and a strategically placed knob provides easy gripping when two hand operation is desired. The unit sands or polishes wood, metal and plastics and can be used with a 5 inch sandpaper disc or lamb's wool buffer or 3 inch sandpaper or rubber disc.

The spindle turns at 5000 RPM idle speed which gives a normal load speed of 3000 RPM. The unit has an attractively styled die cast aluminum housing and is equipped with a 10 foot, rubber covered extension cord. The motor is 115 volt, AC-DC. Clarke Sanding Machine Co., Dept. NS, Muskegon, Mich. (Key No. 165)

G-E Germicidal Unit

Two types of germicidal ultraviolet units have been developed by General Electric X-Ray Corporation for the protection of students and teaching personnel. Both the 15 watt and the 30 watt capacity types use the G-E germicidal

lamp which is contained in a fixture constructed to produce a beam of maximum intensity in a direction to provide the most satisfactory distribution while protecting room occupants from direct radiation. The unit has a reflector of polished aluminum and is louvered to restrict most of the germicidal energy to the desired zone. General Electric X-Ray Corp., Dept. NS, 175 W. Jackson Blvd., Chicago 4. (Key No. 166)

Santocel Insulant Saves Space

Santocel is the name of a new insulating material which will increase refrigerator and freezer capacity up to 60 per cent without adding to outside dimensions. Described as an aerogel, Santocel is a powdery substance from which all liquid matter has been removed without destruction of the microscopically-small honeycomb of individual cells comprising the substance. It provides effective insulation with small bulk.

In practical use, Santocel as the insulating material in a refrigerator would increase the storage space in a 9 cubic foot refrigerator to approximately 13 cubic feet without adding to the outside dimensions. This is accomplished because the use of Santocel as the insulant cuts down the wall thicknesses normally required. Monsanto Chemical Co., Dept. NS, St. Louis 4, Mo. (Key No. 167)

New Package for Downyflake Mixes

All twelve Downyflake Baking Mixes are now packed in new containers, each holding exactly five pounds of mix. The change was made to facilitate use in recipes without weighing and for convenient handling and storage.

The package itself is newly designed. Each container has an outer bag of multi-walled paper that has been tested for extra strength and resistance to tearing. The inner liner or bag is greaseproof, siftproof and moistureproof. Doughnut Corp. of America, Dept. NS, 393 Seventh Ave., New York 1. (Key No. 168)

Pressure Syphon Type Urns

A new pressure-type Tri-Saver Twin Urn of stainless steel is equipped with Tri-Saver permanent stainless steel filters. These filters eliminate the use of urn bags and filter papers and thus prevent spoilage which might occur due to torn filter sheets or sagging urn bags.

The urns are constructed of heavy gauge stainless steel throughout and are leakproof and burnoutproof. The stainless steel jacket around the liners provides air space which prevents chilling of coffee when cold water is drawn into the jacket. Water in the jacket is completely sealed and does not come in contact with the liners. The new twin urn provides all of the advantages of construction developed by this manufacturer. S. Blickman, Inc., Dept. NS, Weehawken, N. J. (Key No. 169)

Outdoor Seating

The new Samson all-steel outdoor settee is designed for long, hard wear. The framework, after fabrication, is hot-dipped galvanized and the No. 15 gauge steel slats, painted green, are



bolted to the framework with flat, roundhead galvanized bolts.

The slats have rounded corners to eliminate possibility of catching clothes on sharp edges and the settee will not splinter, rot from exposure or deteriorate. It is designed for comfort, wear and attractive appearance, and is available in three lengths, 4, 5 and 6 feet. The Stewart Iron Works Co., Inc., Dept. NS, Covington, Ky. (Key No. 170)

RCA "400" Projector



The new postwar RCA 16 mm. sound motion picture projector offers several new operational features. It is lighter in weight than the previous standard size and is available in two models, one providing both sound and silent speeds, the other sound speed only.

The new "400" projector is smaller in size, due to the new "L" shaped amplifier mounting. The new tilt-wheel permits rapid raising and lowering of the projector by fingertip operation of a small dial. The "theatrical type" framing adjusts the position of the film in the gate without moving the aperture plate. Rewind of film is an automatic operation and does not require changing reels, and the RCA "even tension" take-up has been further improved in this new model.

Changeover from sound to silent speed in the sound-silent model is accomplished by simply turning a knob and the cooling system in the unit needs no adjustment since the changeover merely shifts the drive belt from one pulley to another and the motor speed remains the same.

The newly designed four-stage amplifier delivers a full 10 watt output and the "400" speaker has a new design and is engineered to deliver an optimum of high quality sound reproduction regardless of speaker location. The projector and speaker cases have a new sprayed-on plastic finish with seamless rounded corners. Radio Corporation of America, RCA Victor Div., Dept. NS, Camden, N. J. (Key No. 171)

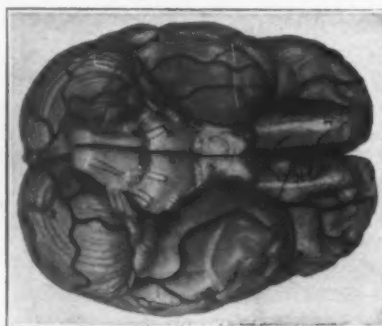
Model 80 Wire Recorder

The new Model 80 Wire Recorder offers simple and inexpensive recording for speech, drama, radio and other classes, for conferences and for "transcribed" announcements over the public address system. The unit is portable, weighs 27 pounds, and is about the size

of a small overnight case. It is complete with a microphone and three spools of recording wire, two 15 minute spools and one 30 minute spool.

The unit makes continuous recordings up to an hour in length and is designed so that there is no damage resulting from an accidental current interruption. The recordings are designed to be re-played thousands of times with no appreciable decrease in tone or volume and to be "erased" or re-recorded at any time and as many times as desired. Recordings can be made directly from a radio, a phonograph or through a microphone and can be played back immediately through the unit itself, through an external speaker and amplifier, such as a public address system, or through an external speaker while utilizing the amplifier in the unit. A series of microphones can be connected to the unit to record conferences or meetings.

The Wire Recorder utilizes the principle of magnetism to make recordings. Its low operating cost is a point of interest. Webster-Chicago Corp., Dept. NS, 5610 Bloomingdale Ave., Chicago 30. (Key No. 172)



Brain Model

A new life size model of the brain, for teaching purposes, is dissectible into six parts. Each part is completely lettered for identification. All parts of the brain can be studied in connection with each other including the pineal gland and the optic thalamus. Denoyer-Geppert Co., Dept. NS, 5235 Ravenswood Ave., Chicago 40. (Key No. 173)

Whiz Unifoam Concentrate

A highly concentrated liquid cleaner for floors, floor coverings, painted walls and other surfaces has been announced as Whiz Unifoam Concentrate. Combining a pure vegetable oil base fortified with a wetting agent, the product is designed to be soluble in hot or cold water, to lather freely and not to streak or film. R. M. Hollingshead Corp., Dept. NS, Camden, N. J. (Key No. 174)

Weed Killer

Weed-No-More "40" is a new, highly concentrated weed killer designed for large turf areas. The school with extensive grounds to maintain will find it a great help in keeping the lawns attractive and free from weeds. The product is a butyl ester of 2,4-D in a liquid concentrate which mixes with either water or oil producing a chemical which kills or controls broad leaf weeds but is harmless to grasses. It is available in 1 and 5 gallon cans and in 55 gallon drums and is applied by spraying. The Sherwin-Williams Co., Dept. NS, Cleveland 1, Ohio. (Key No. 175)

Koroseal Apron

A new lightweight apron made of Koroseal film has been developed for use where protection from acids, greases, oils, caustics, fats, blood, solvent, soaps and other matters is desired. The clear, transparent film will not become stiff or tacky and can be sterilized in a disinfecting solution. The apron is available in two sizes, 29 by 35 inches with tape and hem and 35 by 45 inches with tape, hem and grommets. The B. F. Goodrich Co., Dept. NS, Akron, Ohio. (Key No. 176)

"Tendersteak Delicator"

Tough cuts of meat can now be made tender with the new Model No. 700 "Tendersteak Delicator." Combinations of pork, lamb, beef, veal and other meats can also be made into "steaklets" and other combinations.

All parts of the machine that come in contact with meat are of stainless steel. The unit has an automatic safety cut-off switch when the cover is raised, a hexagon blade shaft so that blades cannot slip under strain, three point suspension rubber feet; it is streamlined in design and has a white Dulux finish.



U. S. Slicing Machine Co., Dept. NS, La Porte, Ind. (Key No. 177)

Hone for Pencil Sharpeners

The Dillon E-Z Hone is designed to renew the blades on pencil sharpeners and thus increase their life and efficiency. The Hone sharpens by simply being inserted into the sharpener like a pencil and the crank turned, several times, in reverse.

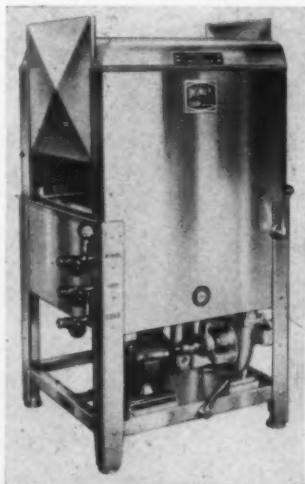
Made of fine heat-treated steel, the E-Z Hone has a red catalyn handle and comes in a leather carrying case. W. C. Dillon & Co., Dept. NS, 5410 W. Harrison St., Chicago 44. (Key No. 178)

Commodore Dishwashing Machine

New mechanical and construction features of the Commodore, door-type dishwashing machine include a packless ball bearing pump provided with carbon seal and a precision-ground stainless steel shaft on which is mounted an all-bronze balanced impeller. The pump is based on the engineering principles employed in an automobile water pump which is designed for years of service without attention.

The rigid and shock-absorbent door construction, permitting the greatest ease in sliding doors up and down, is another new feature. Designed to provide service for approximately 150 to 300 persons per meal, the Commodore can be operated either from the right or the left and occupies 28 by 30 inches of floor space. Spray sterilization is provided through stainless steel nozzles and both wash and rinse manifolds are easily removed for cleaning.

The new model also features quick opening drain valve, direct action thermometer, adjustable legs, easily removable scrap screens and a new funnel type skimmer overflow for the removal of fatty substances from the water surface. Insinger Machine Co., Dept. NS,

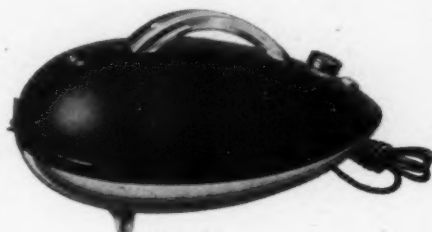


6245 State Rd., Philadelphia 35, Pa. (Key No. 179)

Torpedo Insecticide Spray Gun

The Torpedo Aerosol Spray Gun employs super heated steam as a vehicle for propelling minute aerosol particles of concentrated insecticide or germicide into the atmosphere. This precision built applicator operates at about 60 pounds of pressure which is maintained constant through means of a patented automatic loading valve which is fully automatic and assures steady performance even if there should be a pressure fluctuation. Safety features provide protection in case of improper use or negligence.

Equipped with a two way aspirator nozzle, the Torpedo can deliver either a very fine aerosol or a coarse aerosol mist by the simple shifting of a small lever. The high operation pressure makes it possible to force insecticide in large quantities into normally inaccessible areas and there is no streaking or dampness of the area in front of the nozzle because of the fine particle size of the insecticide as it comes from the gun. One loading of the Torpedo is designed



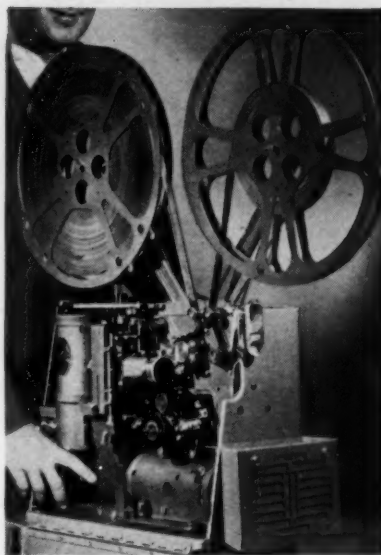
to permeate 1,600,000 cubic feet of space.

The operating mechanism is enclosed in a heavy gauge, die formed, aluminum shell, treated to prevent abrasion and corrosion. The brilliant, lustrous finish is available in maroon and silver or emerald and silver. The carrying handle is of Plexiglass as are the supports. A pilot lamp illuminates the handle and the unit is simple in operation. It requires 115 volts AC or DC. Sanitary Aids Co., Dept. NS, Lock Drawer 508, St. Louis 3, Mo. (Key No. 180)

Plasti Asphalt Tile Renewer

AT-50 Plasti Asphalt Tile Renewer has been developed as a rejuvenator for worn asphalt tile floors. It is a clear plastic resin coating which restores the surface and original beauty of worn, porous asphalt tile flooring. It dries within two hours to a 75 per cent gloss that provides a tough finish designed to withstand heavy foot traffic and wear. Containing no wax, varnish or shellac, the product does not soften, smear or warp the tile. It is easy to clean or wax and can be renewed when necessary. Duro Industries, Dept. NS, 502 S. Canal St., Chicago 7. (Key No. 181)

Victor "Lite-Weight" Projector



The new Victor "Lite-Weight" 16 mm. sound motion picture projector is designed especially for use in the school classroom, in special training or entertainment programs and in the home. It is considerably lighter in weight and smaller in size than the standard units, thus adding to the ease of transporting it for use wherever needed. A feature of the new unit is the fact that it is housed in a streamlined single unit aluminum case. The case is of unique design for 16 mm. sound motion picture equipment as the demountable speaker fits inside the projector case for carrying purposes and is mounted on the front of the projector during operation.

In the individual classroom the new design and light weight of the unit make it easily carried by a female teacher or a child operator. The amplifier is designed for classroom, home or conference room.

The new unit has the clutch-controlled rewind and the Instantilt features introduced by Victor, has reverse operation and will accommodate either sound or silent film at their respective speeds. It incorporates the safety film trip and the 180 degree swing-out lens, framing screw adjustment, spira-draft lamphouse and the duo-flexo pawls. The 750 watt illumination is standard and the top-mounted reel arms will accommodate 2000 foot reels. Victor Animatograph Corp., Dept. NS, Davenport, Iowa. (Key No. 182)

Cory Serving Decanter

The new Cory Model CDA glass coffee serving decanter is full twelve cup capacity and features a newly designed pouring lip and steady plastic handle. Cory Corp., Dept. NS, 221 N. La Salle St., Chicago 1, Ill. (Key No. 183)

RECENT CATALOGS AND BOOKLETS

• The 1947 Catalog of Standardized and Diagnostic Tests published by California Test Bureau, 5916 Hollywood Blvd., Los Angeles 28, Calif., became effective May 1, 1947. The tests cover achievement, aptitude, personality, ability, intelligence and general educational subjects. They are available to schools or colleges, teachers, students, business and industrial firms and consultants. (Key No. 184)

• The complete line of Bradley Washfountains, Multi-Stall Showers and Drinking Fountains is covered in the new 24 page Catalog No. 4701 issued by the Bradley Washfountain Co., N. 22nd and W. Michigan Sts., Milwaukee 1, Wis. The booklet also contains information on the new two-person Bradley Duo Washfountain and the redesigned stainless steel and enameled iron washfountains. Specification data and washroom planning suggestions are included together with notes on improved sanitation and reductions in maintenance and installation costs. (Key No. 185)

• "100 Years of Service" of the John Van Range Co., Fifth & Butler, Cincinnati 2, Ohio, has been commemorated in a special catalog. This 60 page booklet, with board covers, gives full information on the food service equipment manufactured by this company with illustrations showing cafeteria installations. Detailed information on the construction of the equipment and some interesting historical data on the company complete this attractive book. (Key No. 186)

• Grease interception is an important problem to the school administrator and his maintenance staff. A pamphlet giving detailed information on this subject has been issued by Wade Mfg. Co., Elgin, Ill., entitled "A New Principle in Grease Interception." Administrators, engineers and those responsible for planning and maintenance should find this helpful and informative. (Key No. 187)

• "45 Years of Progress in Lighting" is the title of an attractive booklet issued by Benjamin Electric Mfg. Co., Des Plaines, Ill., describing the new Benjamin Laboratory dedicated to the science and art of illumination. (Key No. 188)

• A 32 page catalog and price list on "Changeable Letter Signs" has been issued by Bulletin Boards & Directory Products, Inc., 724 Broadway, New York 3. The catalog is indexed and includes all types of changeable letter boards with a special section on menu boards. (Key No. 189)

• Dietitians, home economics teachers, chefs, cooks and others concerned with food problems will be interested in the booklet issued by Cling Peach Advisory Board, 260 California St., San Francisco 11, Calif. Entitled, "How Famous California Chefs Use Canned Cling Peaches," the booklet contains a variety of special recipes using peaches in salads, desserts, cakes, pies, fruit cocktail, breakfast service, as garnishes and in fritters and omelets. The first page begins, "You helped write this book . . ." and the booklet continues with the special recipes of well-known California chefs. (Key No. 190)

• Oakite Products, Inc., 22 Thames St., New York 6, has published a new Digest especially for cafeteria managers, janitors and maintenance engineers which describes 62 sanitation-cleaning operations for schools and institutions. A special section is devoted to cafeteria department cleaning operations describing specialized materials and methods for machine or hand dishwashing, cleaning and chemical sterilization of kitchen utensils and equipment and many other tasks. Floor cleaning, deodorizing, cleaning lavatories, shower rooms and wash rooms, walls, woodwork and other painted surfaces are described in another section for the janitorial staff. Descaling heating boilers, removing rust spots, stripping paint and other problems of the maintenance and engineering department are covered in a third section. (Key No. 191)

• "Nairn Linoleum" and "Nairn Marine Deck Covering" are the subjects of recently published booklets giving detailed information on these two products of Congoleum-Nairn Inc., Kearny, N. J. The catalog on Nairn Linoleum for floors and walls contains data on product uses and specifications and has sample color pages of all available colors in the various wall and floor coverings made by the company. Detailed information on the new Nairn Marine Deck Covering, the heavy duty material for floors, is given in the second folder. (Key No. 192)

• Bulletin 106-A, "Dorex Activated Carbon Air Recovery Panels," offers complete data on the design, construction, function and application of these units to purify air, improve ventilation, save cooling and heating. A performance chart which provides all data necessary for proper panel selection with capacities at various resistance, fresh air percentages and approximate hours of service life for each type, size and series of panel are included in this bulletin issued by W. B. Connor Engineering Corp., 114 E. 32nd St., New York 16. (Key No. 193)

Manufacturers' Plant News

Neumade Products Corp., 427 W. 42nd St., New York 18, has been appointed sole and exclusive distributor of the lifetime Griswold splicer for 8 mm., 16 mm. and 35 mm. film, silent and sound. (Key No. 194)

Bell & Howell Co., 7100 McCormick Rd., Chicago 45, announce the purchase of the Microfilm Recording Co. of Chicago on August 1. Bell & Howell's microfilm sales, service and repair departments and processing laboratories have been moved to the Microfilm Recording Company quarters at 221 N. La Salle St., Chicago. All microfilm equipment manufactured and sold by Bell & Howell will be marketed under the trade name, "Micro-Filmo." (Key No. 195)

The American Stove Co., 4301 Perkins Ave., Cleveland 3, Ohio, purchased a former war production facility plant, complete with machinery, in 1946. The plant has been converted to the manufacture of Magic Chef heavy duty gas cooking equipment and is designed and equipped to produce at a rate of between two and three times that of pre-war production schedules. The new headquarters are located at 3201 Harvard Ave., Cleveland. (Key No. 196)

The General Detroit Corp., 2200 E. Jefferson Ave., Detroit 7, Mich., announces a change in name for the complete line of General portable fire extinguishers. The new name, Quick Aid Fire Guard, will be applied to all types of portable fire extinguishers manufactured by the company and its subsidiaries. This name replaces the brand names of S.O.S. Fire Guard, CD-Sno Fog, Red Star, Hi-Test, Floafome, Alaskan, Protector and Pace-maker. (Key No. 197)

Varlar, Inc., a division of United Wallpaper, Inc., Merchandise Mart, Chicago 54, announces that the new stain-proof wall covering, Varlar, is now in production in its new manufacturing plant in Aurora, Ill. This plant is the first unit of the new United Wallpaper plant to be in operation and was designed and built exclusively for the production of Varlar. A yearly capacity of 35,000,000 square feet of wall covering is expected of the new plant. (Key No. 198)

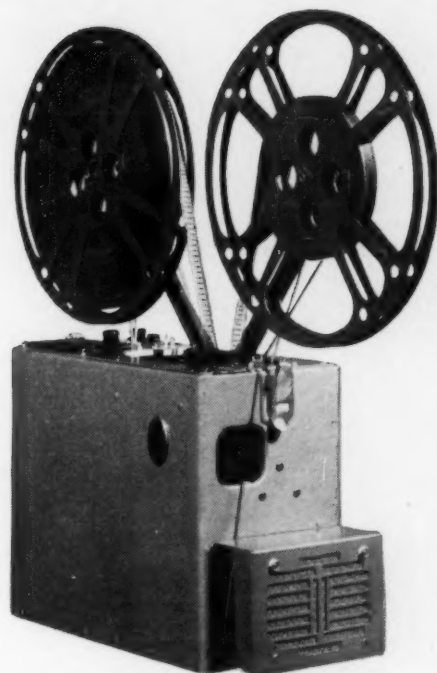
A building program to expand its facilities has been announced by the Dixie Cup Co., Easton, Pa. The plant at Easton has added a new four story wing increasing its capacity by 25 per cent. The plant of the Individual Drinking Cup Co., makers of Dixie and Vortex cups, at Darlington, S. C., is doubled in size. (Key No. 199)



VICTOR "LITE-WEIGHT"

Announcing the new

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- 69% SMALLER IN SIZE
- ECONOMICALLY PRICED



16mm Sound Motion Picture Projector

AGAIN VICTOR SUPREMACY IS ACKNOWLEDGED with the announcement of the amazing new "Lite-Weight". Encased in aluminum, its portability, versatility and economy stand unchallenged in the 16mm field. Truly the "Lite-Weight" marks a most momentous step in Victor's years of progress in the development of a compact sound motion picture projector for the home, school, church and industry. Write for details today.

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